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#### **Subchapter 1 – Purpose**

#### §6-101 Authority

This <u>These rules</u> is <u>are adopted by the Secretary of the Agency of Natural Resources pursuant to under the authority of 10 V.S.A. Chapter 159, Waste Management. The Secretary has the power to adopt, amend, and repeal rules pursuant to 3 V.S.A. Chapter 25.</u>

#### Related statutes include:

<b>Statutory Reference</b>	<b>Topic</b>
3 V.S.A. chapter 51, subchapter 2, §2822(j)	<u>Fees</u>
24 V.S.A. chapter 61, subchapter 8	Police powers of municipalities for rubbish and garbage
32 V.S.A. chapter 151, subchapter 13	Franchise tax on waste facilities
10 V.S.A. chapter 164	Comprehensive mercury management
10 V.S.A. chapter 166	Collection and recycling of electronic devices
10 V.S.A. chapter 168	Product stewardship for primary batteries and rechargeable batteries

#### §6-102 Declaration of Purpose

These rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont. They These rules amend the Solid Waste Management Rules effective as adopted on October 15, 2004 March 15, 2012.

#### §6-103 Severability

The provisions of any section of these rules are shall be severable. If any provision of these rules is invalid or if any application of these rules to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

#### §6-104 Fees

- A. Fees related to these rules are established in 3 V.S.A. 2822(j). Municipalities shall be exempt from the payment of fees in accordance with 3 V.S.A. §2822(i).
- B. Facilities involving both a public and private entity are required to pay relevant fees. The only exception to this shall be for projects where the role of the private applicant is to function solely as a contracted service provider and the municipalities establishes and maintains the approved financial responsibility instrument, controls facility operations, directly utilizes the services of the facility, maintains an unencumbered right to possession, maintains access to the facility at all times and controls the financial

aspects of the facility (e.g. obtains the user fees and pays any fees or taxes). The contractor would not be vested in the financial viability of the facility.

#### §6-105 Incorporation by Reference

When reference is made herein to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on the effective date of these rules.

#### §6-106 Signatories to Certifications and Reports

- A. The following individuals shall be co-applicants to a solid waste application (if different parties):
  - 1. The facility owner;
  - 2. The facility operator; and
  - 3. The owner of the property on which the facility is located.
- B. Applications and reports requested or required by the Secretary shall be signed by each applicant or by a duly authorized representative of the applicant.
- C. A person is a duly authorized representative for the purposes of subsection B of this section only if:
  - 1. The authorization is made in writing and is signed by the facility applicant;
  - 2. The authorization states that the applicant has delegated the legal authority for the representative to sign on behalf of the applicant; and
  - 3. The written authorization is submitted to the Secretary.
- D. If an authorization described in subsection (c) of this section no longer meets the requirements of that subsection, a new authorization satisfying the requirements of subsection (c) of this section shall be submitted to the Secretary prior to or together with any documents signed by the new authorized representative.
- E. Any person signing a document pursuant to subsection (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of the person or persons who operate the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### **Subchapter 2 – General Definitions and Acronyms**

#### §6-201 Definitions

All used in this chapter, all terms not defined herein shall have the meaning given them in 10 V.S.A. §6602, unless a different meaning clearly appears from the context. Terms presented in this subchapter apply generally to these rules. Additional terms relevant to specific waste management activities are included in subchapters 4, 11, 14.

- "Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.
- "Active portion" means the part of a facility or operational unit that has received or is receiving wastes and that has not been closed in accordance with the Solid Waste Management Rules.
- "Adjoining residences and landowners" shall include those residences and landowners residing on land adjacent to the facility applied for, notwithstanding the presence of a road, railroad, other right of way or a watercourse located on the boundary of the parcel of land on which the facility is located means a person who owns land in fee simple, if that land:
  - A. shares a property boundary with a tract of land where proposed or actual activity regulated by the Department is located; or
  - B. is adjacent to a tract of land where such activity is located and the two properties are separated only by a river, stream or public highway.
- "Administrative amendment" means an amendment to a certification or permit that corrects typographical errors, changes the name or mailing address of a permittee, or makes other similar changes to the certification or permit that do not require technical review of the permitted activity or the imposition of new conditions or requirements.
- "Administratively complete application" means an application for a certification or permit for which all initially required documentation has been submitted, and any required fee, and the information submitted initially addresses all application requirements but has not yet been subjected to a complete technical review.
- "Agency" means the Vermont Agency of Natural Resources
- "Airport" means a public-use airport, open to the public without prior permission and without restrictions within the physical capacities of available facilities.
- "Approved Uniform Solid Waste" means solid waste which has been determined in writing by the Secretary to be uniform, consistent and does not contain yard waste, marketable recyclable materials, hazardous waste as defined by State and/or Federal regulation.
- "Architectural waste" means discarded drywall, metal, asphalt shingles, clean wood, and plywood, and oriented strand board derived from the construction or demolition of buildings or structures.

- "Asbestos" means the fibrous varieties of primarily the amphibole and serpentine mineral groups which include the minerals: chrysotile, riebeckite (crocidolite), cummingtonite, grunerite (amosite), anthophyllite, actinolite and tremolite.
- "Asbestos Waste" means a waste that contains any type of asbestos in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous material.
- "Bird Hazard" means an increase in the likelihood of collision between birds and aircraft that may cause damage to the aircraft or injury to its occupants.
- "Biosolids" means sewage sludge derived, in whole or in part, from domestic wastes which has been subjected to a treatment process for the reduction of pathogens and has been shown to meet the applicable requirements from contaminant concentrations, vector attraction reduction, and pathogen reduction, such that the material may be applied to the land under a site specific solid waste facility certification.
- "Cell" means a discrete, confined portion of compacted solid waste within a landfill, that is enclosed by a liner and cover material. A cell is a subpart of an operational unit within a landfill.
- "Closure" means the activities and requirements that a facility must shall complete, as prescribed by the facility's certification approved Facility Management Plan or by the Secretary, when a portion of the facility or the entire facility is no longer serving receiving, to processing or dispose disposing of solid waste. The timing of closure is either set in the facility certification or will be determined by the Secretary.
- "Commercial Hauler" means any person who transports regulated quantities of hazardous waste and/or transports solid waste for compensation in a vehicle having a rated capacity of more than one ton.
- "Composite Liner" means a system consisting of two components; the upper component must consist of a minimum 60-mil Flexible Membrane Liner (FML) and a lower component consisting of at least a two-food layer of compacted soil with a hydraulic conductivity of no more than 1 x 10<sup>-7</sup> cm/sec. The FML must be installed in direct and uniform contact with the compacted soil component.
- "Composting" means the controlled biological decomposition of organic matter through active management to produce a stable humus rich material compost (as that term is defined in 10 V.S.A. §6602.
- "Conditionally Exempt Generator or (CEG)" means a generator of hazardous waste which is conditionally exempted from certain provisions of the Vermont Hazardous Waste Management Regulations. A generator is conditionally exempt if they meet the requirements as described in subchapter 7 of the Vermont Hazardous Waste Management Regulations.
- "Construction and Demolition Waste" means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster sheetrock, roofing paper and shingles, insulation, glass, stone, soil, flooring materials, brick, masonry, mortar, incidental metal, furniture and mattresses. This definition includes architectural waste. This waste definition does not include asbestos waste, regulated hazardous waste, hazardous waste generated by households, hazardous waste from conditionally exempt generators, or any material banned from landfill disposal under 10 V.S.A. §6621a.
- "Contact person" means a person designated by the <u>a P permittee(s)</u> who has the authority to make and implement decisions regarding operating conditions at the solid waste management <u>a facility</u>.

- "Container" means a portable device in which a material or waste is stored, transported, treated, disposed or otherwise handled.
- "Corrective action" means steps taken to repair facility structures or operations in order to bring the facility into compliance with design, construction, management and operational regulations and/or to prevent risk of harm or actual harm to the public health, public safety or the environment.
- "Cover Material" means earthen material, or other material approved by the Secretary, that is used to cover compacted solid wastes in a discrete disposal facility in order to control fire, disease vectors and odors, to prevent blowing litter, to discourage scavenging by animals, and to assure an aesthetic appearance.
- "Custodial Care" means the continued management of the end-use obligations, particularly protection of the landfill cap and limiting access, following completion of the post-closure period.
- "Development soils" means unconsolidated mineral and organic matter overlying bedrock that contains polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead in concentrations that:
  - (1) exceed the relevant soil screening level for residential soil;
  - (2) when managed in compliance with 10 V.S.A chapter 159 §6604(a) and §6605(c);
    - (i) pose no greater risk than the Agency-established soil screening value for the intended reuse of the property; and
    - (ii) pose no unreasonable risk to human health through a dermal, inhalation, or ingestion exposure pathway;
  - (3) does not leach compounds at concentrations that exceed groundwater enforcement standards; and
  - (4) does not result in an exceedance of Vermont groundwater enforcement standards.
- "Development soil concentration level" means those levels of polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead expressed in units of mass per mass, contained in the development soils.
- "Diffuse Disposal Facility" means surface or subsurface disposal areas where agronomically beneficial waste are disposed at a controlled application rate, usually based on crop nutrient requirements, not tolerance.
- "Discarded" means a material that is:
  - A. delivered to a treatment, storage, recycling or disposal facility;
  - B. abandoned;
  - C. burned or incinerated;
  - D. stored or placed in a manner that constitutes the discharge, injection, spilling or leaking of material or any constituent thereof into or on any land or water or into the air;
    - E. placed in or near the public right of way for collection; or
    - F. conveyed to a commercial hauler for delivery to a treatment, storage, recycling or disposal facility.
  - <u>It</u> *does not* mean a material that is used in a manner approved by the Secretary by means of procedure as acceptable and not posing a threat to public health or the environment.

- "Discharge" means the <u>accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a waste, or waste constituent, into or on any land or water, or into the air. placing, deposition or emission of a waste directly or indirectly into or on any land or water or into the air.</u>
- "Discrete Disposal Facilities" means all facilities used for the disposal of solid wastes with the exemption of diffuse disposal facilities. A discrete disposal facility may include one or more landfill units.
- "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.
- "Diversion" means the management of solid wastes through methods other than disposal. Diversion includes, but may not be limited to: recycling, composting, reuse, and anaerobic energy production. Use of materials for alternative daily cover at landfills or the incineration of solid waste to produce energy does not constitute diversion.
- "Domestic Wastes" means wastes originating from bathrooms, kitchens, showers, toilets or other sanitary facilities (public or private) regardless of the degree of treatment.
- "Drinking Water Source" means any surface water or groundwater intake used, or permitted to be used as a source of drinking water for human consumption.
- "Environmental Notice Bulletin" or "bulletin" means the website and e-mail notification system required by 3 V.S.A. §2826.
- "Exceptional Quality (EQ) Biosolids" means products derived in whole or in part from domestic wastes with have been subject to and meet the requirements of a pathogen reduction process established in 40 CFR Part 503.32(a)(2-4; 7 or 8); one of the vector attraction reduction standards established in 40 CFR Part 503.33; the contaminant concentration limits in §6-1306(A)(13) and if by a composting process, §6-1305(B)(1)(iv) of these Rules. EQ biosolids, once released from the generating facility, are no longer considered to be solid wastes in accordance with §6-301(A)(5) of these Rules and may be marketed and distributed to the general public.
- "Facility" means all contiguous land, structures, other appurtenances and improvements on the land, used for treating, storing or disposing of solid waste. A facility may consist of several treatment, storage or disposal operational units.
- "Fact Sheet" means a document that briefly sets forth the principle facts and significant factual, legal, methodological, and policy questions considered in preparing a draft decision.
- "Final Closure" means the completion of all closure activities.
- "Final Grades" means the maximum authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.
- <u>"Final Cap" means an engineered layer of materials approved by the Program placed on the surface of a landfill</u>
  <u>where no additional waste will be deposited. Final cap shall meet the minimum requirements of these rules and achieve the performance criteria of minimizing infiltration and controlling landfill gas emissions.</u>

- "Floodplain" means the land area adjacent to a surface water body that is below the one hundred (100) year flood elevation.
- "Floodway" means the <u>channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the one-hundred-year flood, base flood, without cumulatively increasing the water <u>surface elevation more than one foot at any point.</u> area of land and water necessary to convey the one hundred (100) year flood without cumulatively increasing the water surface elevation more than one (1) foot.</u>
- "Food residual" means pre- and post-consumer food scraps which are compostable material. Excludes food processing residuals derived from the processing of meat and meat products such as animal slaughtering and rendering operations.
- "Geosynthetics" means a generic classification of all synthetic materials used for geotechnical engineering applications. Includes geotextiles, geogrids, geomembranes, geo nets and geocomposites.
- "Groundwater" means the water below the land surface, but does not include surface waters within the meaning of 10 V.S.A. §1251(13).
- "Growth Capacity" means the volume of materials that a facility's designed infrastructure is capable of handling. Certifications will be written growth capacity amounts and this volume may be different (greater) than the actual volumes of material managed at the facility.
- "Guidelines" means recommended considerations, technical criteria, specifications and engineering practices for location, siting, design, operation, and maintenance of solid waste management facilities.
- "HHW/CEG Hazardous Waste Collection Facility" means a facility used for the collection and storage of Household Hazardous Wastes (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG).
- "Hazardous Waste" means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which may have an unusually destructive effect on water quality if discharged to ground or surface waters of the State. All special nuclear, source, or byproduct material, as defined by the Atomic Energy Act of 1954, is specifically excluded from this definition.
- "High Carbon Bulking Agent" means carbon-based material that adds structure and bulk, assists in moisture management and increases air space within a compost pile.
- "Household Hazardous Waste" means any waste from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas) that would be subject to regulation as hazardous wastes if it were not from households.

- "Implementation Plan" means that a plan which is adopted and found to be consistent with the State solid waste management plan. This plan must include all the elements required for consistency with the State plan and an applicable regional plan and shall be approved by the Secretary.
- "Implemented Waste" means all solid waste which originates from a municipality which manages waste in accordance with a solid waste implementation plan approved by the Secretary.
- "Interim Cap" means a temporary layered landfill capping system. May consist of either, or a combination of, soil and geosynthetics barriers designed to control emissions and minimize infiltration.
- "Intermediate Cover" is a landfill cover system which is used when an opened area of the landfill is not anticipated to receive waste for a period of 3 months or more. This cover shall include 6 inches of soil in addition to the 6 inches of daily cover.
- "Incinerator" means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of a solid waste an unwanted material.
- "Inert Materials" means material that is non-putrescible and that will not exceed Vermont Groundwater

  <u>Enforcement Standards when analyzed using EPA SW-846 synthetic precipitation leaching procedure</u>
  (SPLP)
- "Insignificant Waste Management Event" means a waste disposal, storage, treatment or processing event of limited duration that will not result in a threat to the public health and safety or to the environment, and will not create a nuisance, without having received a solid waste certification.
- "Lateral Expansion" means a horizontal expansion of the waste boundaries of an existing municipal solid waste landfill unit.
- "Leachate" means liquid that passes through or emerges from a solid waste, it may contain dissolved, suspended or miscible materials, chemicals or biologic products that have been removed from the waste. Means liquid containing dissolved, suspended, or miscible materials that pass through or emerges from solid waste.
- "Leaf and Yard Residuals" means source separated, compostable untreated vegetative matter, including grass clippings, leaves, kraft paper bags, and brush, which is free from non-compostable materials. It does not include such materials as pre- and post-consumer food residuals, food processing residuals, or soiled paper
- "Liquid Waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095A 9095B (2004, Paint Filter Test), contained in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).
- "Major Amendment" means an amendment to an individual permit or notice of intent under a general permit that necessitates technical review.
- "Mandated Recyclables" means the following source separated materials: aluminum and steel cans; aluminum foil and aluminum pie plates; glass bottles and jars from food and beverages; polyethylene terephthalate (PET) plastic bottles or jugs; high density polyethylene (HDPE) plastic bottles and jugs; corrugated cardboard; white and colored paper; newspaper; magazines; catalogues; paper mail and envelopes; boxboard; and paper bags.

- "Minor Amendment" means an amendment to an individual permit or notice of intent under a general permit that requires a change in condition or requirement, does not necessitate technical review, and is not an administrative amendment.
- "Mercury-Added Consumer Product" means a device or material into which elemental mercury or mercury compounds are intentionally added during its formulation or manufacture an in which the continued presence of mercury is desired to provide a specific characteristic, appearance, or quality, or to perform a specific function. For the purposes of this Chapter "mercury-added consumer products" shall be those mercury containing products required to be labeled by 10 V.S.A. §7106; namely:
  - (A) a thermostat or thermometer
  - (B) a switch, individually or as part of another product
  - (C) a medical or scientific instrument
  - (D) a electric relay or other electrical device
  - (E) a lamp
  - (F) a battery, sold to the public, other than a button battery
- "Mining Activity" means the process or business of extracting metals, minerals, rocks or ores from the earth.
- "Mining Mineral Processing Waste" means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity and where chemicals are intentionally added as part of that processing. Mining waste Mineral processing waste does not include commercial products from mined materials.
- "Mineral Processing Mining Waste" means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity that is generated from the beneficiation, irrespective of the addition of chemicals, of rock or ore to separate and concentrate valuable minerals from waste material, remove impurities, or prepare the rock for further refinement. Mineral processing Mining waste includes asbestos waste, except when that asbestos waste is disposed at a certified facility in accordance with subchapter 10. Mineral processing Mining waste does not include mining waste solely from cutting, shaping or finishing granite, marble, limestone, slate or other stones for monuments, buildings or other similar uses.
- "Mobile HHW/CEG Hazardous Waste Collection Unit" means a vehicle or trailer used to collect Household Hazardous Waste (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG), at more than one location.
- "Mobile Solid Waste Collection Operation" means the operation of a vehicle or trailer, or a container on or attached to such vehicle or trailer used for the collection of solid waste.
- "Municipal Solid Waste" means combined household, commercial and industrial waste materials generated in a given area.
- "Non-Implemented Waste" means all solid waste which originates from a municipality that does not have a solid waste implementation plan approved by the Secretary
- "Nuisance" means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the results of the storage, transport, processing or disposal of solid wastes. Constitutes the

- interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.
- "Organics" means any carbon based plant or animal material or byproduct which will decompose into soil.

  Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.
- "Organics Recycling Facility" (ORF) means a facility where organic materials are collected, treated and stored in preparation for transfer to an anaerobic digester or compost operation.
- "Operating Capacity" means the volume of material that a facility is limited to managing consistent with the volume of materials for which fees have been paid within the operational year. This applies only to private facilities
- "Operational Unit" means a discrete area of land or excavation that plans to receive, currently receives or has received solid waste for permanent disposal.
- "Operator" means the person responsible for the overall operation of the facility and whose actions or failure to act may result in non-compliance with these rules or the facility certification. Operators must have the minimum required training as required by the training plan submitted with the facility application for certification.
- "Open Burning" means the burning of solid wastes in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney, or other enclosure.
- "Permitted Hazardous Waste Transporter" means a commercial hauler or transporter permitted to transport hazardous waste, pursuant to the Vermont Hazardous Waste Management Regulations.
- "Person" means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department or subdivision of the state, federal agency, or any other legal or commercial entity.
- <u>"Post-Closure"</u> means the <u>regulated</u> time period following <u>landfill</u> closure <u>for the purpose of managing</u>, <u>maintaining financial responsibility for and monitoring any potential threat to human health and/or the environment, as described in subchapter 10 of this rule.</u>
- "Processed Construction and Demolition Debris" is construction and demolition debris which have had all hazardous and recyclable materials removed, and which consists of materials with little or no economic value which may be disposed of.
- "Processed Glass Aggregate" means the mixed glass cullet produced from crushed and screened clean food and beverage containers. PGA shall contain no hazardous waste and no more than 5% contamination by weight from china dishes, ceramics, or plate glass; or 1% contamination by weight from screw tops, plastic rings, paper or labels. PGA must be crushed and screened such that 95% of the material passes a 25.0 mm screen and not more than 3% of the material that passes through the 4.75 mm sieve passes the 75 μm sieve.
- "Processed Recyclable" means the product resulting from recyclable materials which have been treated by any method, technique, or process.

- "Qualified Operator" means an operator who has reviewed and completed the operator training plan for a certified facility and can operate that facility in compliance with the facility management plan and certification conditions.
- "Recyclable Materials" means solid waste <u>materials that can</u> which may be reclaimed and/or processed so that they may to be used in the production of materials or products.
- "Recycle" means the process of <u>utilizing reclaiming and/or processing solid</u> waste <u>materials to produce new for the production of raw</u> materials or products, but shall not include <u>processing incineration of solid</u> waste to produce energy or fuel products.
- "Regional Plan" means that plan which is prepared and adopted in accordance with the provisions of 24 V.S.A. §4348.
- "Regulated Medical Waste" means that portion of waste generated in the healthcare industry which requires special handling and treatment prior to disposal. This includes pathological waste, blood products, infectious agents, sharps, animal infectious waste, chemotherapy waste, infectious isolation waste, and biotechnological by-product effluents.
- "Residence" means a permanent structure where a person lives during some or all of a year.
- "Reuse" means the use of a material or product more than once before it is recycles or discarded as solid waste.
- "Sanitary Landfill or Landfill" means a land disposal site employing an engineered method of disposing of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.
- "Saturated Zone" means the zone in which the voids in the rock or soil are filled with water.
- "Secretary" means the Secretary of Natural Resources, or his or her duly authorized representative.
- "Semi-permanent HHW/CEG Hazardous Waste Collection Unit" means either structures or equipment used for the collection and storage of Household Hazardous Waste (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG), which are transported between sites certified or approved by the Secretary and which may remain temporarily at that location.
- "Septage" means the liquid and solid materials pumped from a septic tank or cesspool during cleaning.
- "Sludge" means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment plant or process, water supply treatment plant, air pollution control facility or any other such waste having similar characteristics and effects.
- "Solid Waste" means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment; <a href="https://discarbon.bulking.gents.used">https://discarbon.bulking.gents.used</a> in composting; or solid or dissolved materials in industrial discharges which are point sources subject to permits under the Water Pollution Control Act, 10 V.S.A.,

- eh. chapter 47. Note: fFor the purposes of these rules, solid waste that is also hazardous waste is subject to further regulation under the Vermont Hazardous Waste Management Regulations.
- "Solid Waste Management" means the activities that result in the storage, transportation, transfer, or treatment of solid waste or recyclable materials, or in the disposal of solid waste.
- "Solid Waste Management Entity" means a local solid waste management authority or organization, such as a solid waste district, alliance, or independent town.
- "Stabilized" refers means the resulting to the condition of waste in which once the waste it no longer undergoes spontaneous physical, chemical or biological changes spontaneously.
- "Storage" means the actual or intended containment of wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such wastes.
- "Technical Review" means the application of scientific, engineering or other professional expertise to the facts to determine whether the activity for which a permit is requested meets the standards for issuing the permit under statute or rule.
- "Transfer" means to carry, remove, transport, or shift solid waste from one place, facility, vehicle, trailer, or container to another.
- "Transfer Station" means a solid waste management facility where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.
- "Transport or Transportation" means the movement of wastes by air, rail, road, highway or water.
- "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, amenable for storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.
- "Uniform Solid Waste" means solid waste which has been determined, in writing, by the Secretary to be consistently uniform (e.g. foundry sands) and does not contain yard waste, marketable recyclable materials or hazardous waste as defined by State and/or Federal regulation.

#### "Untreated Wood" means:

- (A) wood produced by splitting or chipping a whole tree, including wood, bark, tree tops, limbs and logging residue;
- (B) any timber, board or sawn dimensional lumber which has not been treated, coated or preserved. The term This does not included any manufactured building material, such as, but not limited to, pressure treated wood, plywood, particle board or waferboard;
- (C) sawdust produced solely by the primary processing of the acceptable materials listed (A, B, C) in this definition;

- (D) fuel pellets produced from the acceptable materials described in this definition.
- "Used Oil" means any petroleum product that has been refined from crude oil (in whole or in part), or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point of greater than 100 degrees (Fahrenheit). <u>Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived from crude or synthetic oils that are used as fuels (e.g. gasoline, jet fuel and diesel fuel), cleaning agents or solvents (e.g. naptha or mineral spirits).</u>
- "Vectors" means organisms or media (e.g., air, water, soil) that serve to transmit disease organisms.
- "Vermont Hazardous Waste Management Regulations" or "VHWMR" means the Vermont Hazardous Waste Management Regulations, as amended.
- "Waste" means a material that is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded or that has served its originally intended use and is normally discarded or that is a manufacturing or mining by-product and is normally discarded.
- "Waste Management Boundary" means the outer perimeter of the area within which solid waste is stored, treated or disposed.
- "Water Table" means the upper surface of the zone of saturation.
- "Waters" means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border upon the state or any portion of it the State.
- "White Goods" means discarded refrigerators, washing machines, clothes dryers, ranges, water heaters, dishwashers, freezers and microwave ovens and other similar domestic and commercial large appliances.
- "Working Face" means that portion of the discrete disposal facility a landfill where solid wastes are discharged and are spread and compacted prior to the placement of cover material.
- "100-year flood" means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period

#### §6-202 Acronyms

ADC – Alternative Daily Cover

CEG – Conditionally Exempt Generator

<u>CFR – Code of Federal Regulations</u>

EQ – Exceptional Quality

FML – Flexible Membrane Liner

FMP – Facility Management Plan

GWES – Groundwater Enforcement Standards

<u>HDPE – High-density Polyethylene</u>

HHW – Household Hazardous Waste

IWMEA – Insignificant Waste Management Event Approval

MRF – Materials Recovery Facility

MSDS – Material Safety Data Sheet

NPDES – National Pollutant Discharge Elimination System

ORF – Organics Recovery Facility

PAH – Polycyclic Aromatic Hydrocarbons

PGA – Processed Glass Aggregate

RMW – Regulated Medical Waste

<u>SWME – Solid Waste Management Entity</u>

SPLP – Synthetic Precipitation Leaching Procedure

VSA – Vermont Statutes Annotated

#### Subchapter 3 – Applicability, Exemptions, and Prohibitions and Administration

#### §6-301 General Applicability

Subject to §6-302 and §6-303 of these rules, Tthese rules shall apply to any persons that stores ing, transports ing, treats ing, disposes ing, recycles ing or otherwise owns, operates, or manages ing any solid waste facility; except as provided in §6-301(b). Such solid waste management facilities include, but are not limited to: storage facilities, (including transfer stations, transportation, incineration, recycling, composting or other processing or treatment facilities) and discrete disposal facilities; and diffuse disposal and land application activities or other solid waste disposal. These rules also apply to persons involved with solid waste planning activities pursuant to 24 V.S.A §2202a(c) (see Subchapter 4 – Waste Management Plans Planning).

# §6-302 Exemptions

- A. The following are exempt from the provisions of regulation under these rules:
  - 1. The disposal of <u>unpainted and contaminant-free</u> <u>brick and concrete</u>, trees, stumps, yard waste, and wood chips generated from these materials, when the origin and disposal of such waste occurs on property under the same ownership or control.
  - 2. [Reserved].
  - 3. Small volumes of less than one cubic yard of waste that exhibit all of the following characteristics:
    - i. are stabilized, treated, or composted;
    - ii. are distributed in association with some other primary product (e.g. nursery stock, top soil)
    - iii. do not contain pathogenic or chemical contaminants above applicable standards (as specified in § 6-1306(L-M) and;
    - iv. pass the prequalifying tests specified in meet the requirements of §6-1306(L-M).
  - 4. Recycling facilities which accept, aggregate, store and/or process less than 50 fifty (50) tons of recyclable materials per year.
  - 5. Solid waste that has been treated or processed in a certified <u>waste management facility</u> provided that the applicant demonstrates to the satisfaction of the Secretary that after treatment or processing; the solid waste poses no threat to the environment, public health and <u>public</u> safety, and does not create a nuisance.
  - 6. Storage and compaction operations or activities managed by a solid waste generator or a consortium of generators, provided that:
    - i. the solid waste generator is a single facility or a single consolidation point for associated or satellite facilities;

- ii. the storage or compaction operations or activities will <del>not</del> result in the <del>disposal</del> <u>diversion</u> of solid waste;
- iii. and operations or activities poses no threat to the environment, public health and public safety, and does will not create a nuisance; and
- iv. This exemption operations or activities does not apply to occur at sludge and septage storage facilities.
- 7. Mobile solid waste collection operations, provided that:
  - i. the vehicle or trailer is registered and inspected as required by the Agency of Transportation;
  - ii. the vehicles, trailers, or containers used to collect solid wastes, <u>must are in adequate</u> condition to prevent <u>any potential or actual</u> the release of all solid wastes and related liquids; and
  - iii. solid wastes collected pursuant to such an <u>by the</u> operation are delivered to a certified waste management facility by the end of the next business day <u>following the date of collection</u>, or within 48 hours of collection, whichever is later.
- 8. The transfer of solid waste by a commercial hauler from a vehicle or trailer used for the collection or storage of solid waste to another vehicle or trailer provided:
  - i. The transfer <u>activity</u> meets the requirements of §6-302(A)(7); and
  - ii. The receiving vehicle or trailer has a capacity not greater than 15 fifteen (15) tons for solid waste or 10,000 gallons for liquid sludge or septage
- Sludge management facilities located at wastewater treatment plants that are essential to the
  wastewater treatment process and are not used solely for the storage or treatment of sludge.
  Examples of exempt units include, but are not limited to, wastewater treatment lagoons and
  digesters.
- 10. Septage, portable toilet, <u>grease trap wastes</u> and holding tank wastes when disposed of at a municipal wastewater treatment facility or other non-diffuse disposal facility, as determined to be appropriate by the Secretary. This exemption does not, <u>however</u>, relieve operators of wastewater treatment facilities from complying with the reporting requirements set forth in Section 6-706.
- 11. Glycerol that is delivered to an anaerobic digester as a feedstock for digester operations.
- 12. Collection of used oil and used oil filters provided that the collection is in compliance with all applicable used oil provisions of the Vermont Hazardous Waste Management Regulations, as may be amended, adopted pursuant to 10 V.S.A. Chapter 159.
- 13. Wood ash managed in accordance with the 2009 Agency's "Comprehensive Wood Ash Management Procedure".

14. Processed Glass Aggregate (PGA) who	en used for the following applications:
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- i. Roadway, trail, parking lot or sidewalk application, including:
  - i. base course: layer(s) of specified material supporting a surface course;
  - ii. subbase: layer(s) of specified material place on a subgrade to support a base or surface course, or
  - iii. <u>embankments: a portion of a fill section situated between the existing ground and subgrade;</u>
- ii. Utility Trench Bedding;
- iii. <u>Backfill material for underground utilities</u> (sewer and water pipes, electrical conduit and fiber optic line);
- iv. Drainage applications, including:
  - i. Free draining back-fill behind retaining walls; or
  - ii. Foundations drains, drainage blankets, French drains;
- v. Filter media for wastewater treatment systems; or
- vi. <u>Landfill cover: provided that pre-approval for this use is obtained from the Solid Waste Management Program.</u>
- 15. The following materials, when used as high-carbon bulking agents in composting:
  - i. Clean wood chips and shavings;
  - ii. Bark wood chips;
  - iii. Straw;
  - iv. Shelled corn cobs;
  - v. Corn stalks;
  - vi. Shrub trimmings;
  - vii. Clean dry leaves, excluding any leaves vacuumed or accumulated from roadways;
  - viii. Coarse sawdust;

- ix. Nut shells;
- x. <u>Pine needles brown;</u>
- xi. Non-legume hay dry;
- xii. Heavily-bedded horse manure;
- xiii. Paper or paper products, as approved by the Solid Waste Management Program
- 16. Collection, storage, and treatment of regulated medical waste (RMW) by a <u>RMW regulated medical</u> waste generator provided that the conditions in subdivisions (i) through (iii) are met. This exemption does not relieve a generator of RMW from compliance with the requirements of §6-304(H):
  - i. The RMW generator shall comply with the requirements of Subchapter 14 of these rules,
  - ii. The type of RMW accepted by the generator shall be is also of the same type or types of RMW produced by the generator; and
  - iii. The total on-site amount of RMW accepted by the generator from other sources satellite facilities must be is within shall not exceed the storage capacity of the site; and
  - iv. The total annual amount of RMW accepted by the generator from other sources satellite facilities does not exceed the amount of RMW produced by the generator for that calendar year.

This exemption does not relieve a RMW generator from the requirements of §6-304(H) or relieve the waste from meeting the requirements of Subchapter 14 of this rule.

- 17. Cemeteries as defined in 18 V.S.A. §5302
- **B.** Insignificant Waste Management Event Approvals
  - 1. Upon submittal of a written request and receipt of written approval from the Secretary, a person may engage in a waste disposal, storage, treatment or processing event of limited duration that will not result in a threat to the public health and safety or to the environment, and will not create a nuisance, without having received a Solid Waste Certification.

#### §6-303 Waiver of Technical Standards

- A. The Secretary may waive technical and siting requirements of these rules provided the following conditions are met:
  - The President of the United States intends to perform a response action, as defined in 42 U.S.C. §9601(25), or the Secretary intends to perform a removal or remedial action, pursuant to 10 V.S.A. Chapter 159, in response to a release or threatened release of hazardous substances or materials; and

- 3. The Secretary makes a prior written finding that:
  - i. The proposed response action will not adversely affect public health, safety or the environment; and
  - ii. The technical and siting requirements will be complied with to the extent practical in light of the overall objectives of the response.

#### §6-304 Prohibitions

The following <u>activities</u> are prohibited <u>under these rules</u>:

- A. Open burning of solid waste except as may be allowed in accordance with the <u>Vermont Air Pollution</u> Control Regulations, as amended. The Secretary may require any person seeking to conduct the following types of open burning to obtain additional approval for such burning pursuant to § 6-501(D) of these rules as an Insignificant Waste Management Event for the following types of open burning:
  - 1. Burning of structures for the purpose of training firefighters; and
  - 2. Fires to thwart a hazard which cannot properly be managed by any other means or fires that are necessary for the protection of public health.
- B. Combustion of solid waste in an incinerator unless the incinerator meets all requirements of the Air Pollution Control Regulations, as amended, and these rules.
- C. Construction, substantial alteration or operation of any solid waste management facility to which these rules apply without first obtaining certification or modification of a certification from the Secretary in accordance with these rules.
- D. Treatment, storage or disposal of solid waste outside of a certified facility except for the limited exemptions set forth in § 6-302 of these rules.
- E. Disposal of septage, portable toilet and holding tank wastes at a diffuse disposal facility.
- F. Disposal of hazardous waste in solid waste discrete disposal landfill facilities, with the exception of household hazardous waste.
- G. Disposal of wastes listed in 10 V.S.A. §6621a which are designated by law to be prohibited to be disposed of in a discrete disposal landfill facility.
- H. Disposal of regulated medical waste (RMW) which does not comply with the provisions of Subchapter 14 of this these rules.

#### **Subchapter 4 – Waste Management Plans**

#### §6-401 Planning Specific Definitions

"Materials Management Plan" means the solid waste management plan required to be adopted by the Secretary pursuant to 10 V.S.A. §6604.

"Solid Waste Management Entity" or "SWME" means a municipal entity (solid waste district, solid waste alliance or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

#### §6-402 State Material Management Plan

Pursuant to 10 V.S.A. § 6604, the Secretary shall publish and adopt a waste management plan that sets forth a comprehensive statewide strategy for the management of <u>solid</u> waste.

#### §6-403 Solid Waste Implementation Plans

- A. Each municipality shall join or participate in a solid waste management district that has been organized pursuant to 24 V.S.A. chapter 121 or participate in solid waste implementation planning in conjunction with a regional planning commission. A municipality that does not join or participate as provided by this section shall not be eligible for State funds to plan and construct solid waste facilities, and shall not use facilities certified for use by the region or the solid waste management district.
- B. SWMEs shall submit for the Secretary's review and approval a solid waste implementation plan that conforms to the materials management plan adopted by the Secretary pursuant to 10 V.S.A. § 6604 and any regional plan adopted pursuant to title 24, chapter 117 of the Vermont Statutes Annotated. Solid waste implementation plans shall be reviewed by the Secretary in accordance with § 6-403 of this subchapter.

A. Pursuant to 24 V.S.A. §2202a(c)(2), each regional planning commission is required to shall work cooperatively with municipalities within the region to prepare a solid waste implementation plan for adoption by all of the municipalities within the region which are not members of a solid waste district. The plan must conform to the state solid waste management plan and describe in detail how the region will achieve the priorities established by 10 V.S.A. §6604(a)(1).

Each solid waste district is required to adopt a solid waste implementation plan that conforms to the s <u>State</u> waste management plan, describes in detail how the district will achieve the priorities established in 10 V.S.A. §6604(a)(1), and is in conformance with any regional plan adopted pursuant to 24 V.S.A., chapter 117.

#### **§6-404** State Review of Solid Waste Implementation Plans

A. <u>Plan submissions</u>. All solid waste implementation plans and amendments shall be submitted electronically. <u>Submissions shall include as signed letter from the regional planning commission stating that the plan or amendment is consistent with the regional plan adopted in accordance with 24 V.S.A. <u>117.</u></u>

- B. <u>Plans may be reviewed in the following instances:</u> <u>The Secretary shall review the solid waste implementation plan of a regional planning commission, municipality, or solid waste management district entity and evaluate the plan for conformance with the s <u>State solid waste management plan in the following situations:</u></u>
  - 1. upon the request of the <u>SWME</u> regional planning commission, municipality, solid waste alliance or district responsible for preparing the plan; or
  - 2. <u>upon the Secretary's determination that changes made to the materials management plan require</u> review of a solid waste implementation plan to determine compliance with the changes or requirements of these rules; and
  - 3. <u>upon the Secretary's determination that changes made to a solid waste management implementation plan, including any amendments or modification, require review of the plan's conformance to the materials management plan or the requirements of these rules.</u>
  - 4. whenever there is good cause, including significant changes or amendments to municipal solid waste implementation plans or to the State waste <u>materials</u> management plan.
- C. Performance standards. The Secretary shall establish by procedure and publish performance standards for determining compliance under this section. The performance standards shall be updated to reflect any changes made to the materials management plan pursuant to 10 V.S.A. §6604.
- D. Review; pre-approval. Upon a finding that a solid waste implementation plan complies with the performance standards established under subsection (b) of this section, the Secretary shall issue a written pre-approval of the plan to the SWME. If a plan does not comply with one or more of the performance standards, the Secretary shall issue written notification to the SWME indicating that the plan is not approved and identifying the deficiencies of the plan. Pre-approval shall not be issued until all deficiencies are fully addressed.
- E. Public notice and comment. Prior to final review and determination by the Secretary, the SWME shall provide public notice and hold two public hearings on the plan or plan amendment as required by 24 V.S.A. §2202a(c)(4)(B). The SWME shall submit written verification of compliance with this subsection, including the dates of at least two public meetings held on the plan or amendment and a summary of each meeting.

# F. Final approval.

- 1. The SWME shall submit the solid waste implementation plan or amendment for final review and approval. The final submission shall identify changes made to the plan or the amendment, including any changes made in response to the Secretary's determination under subsection (D) of this section.
- 2. The Secretary shall approve the solid waste implementation plan, including any amendments or changes thereto, upon making a determination that:

- i. The plan adequately addresses and conforms to the performance standards of the existing materials management plan; and
- ii. The public notice requirements of 24 V.S.A. §2202(a) and this subchapter have been satisfied
- 3. The Secretary may impose conditions on a determination of approval in order to make the findings identified in subdivision (F)(2) of this subsection.
- G. The Secretary shall approve the solid waste implementation plan of a municipality, solid waste alliance, or solid waste management district upon a determination that the plan conforms to the state solid waste management plan
- H. In determining conformance of a <u>submitted</u> solid waste implementation plan with the <u>s</u> <u>State plan</u>, the <u>Secretary must find that all planning activities and items required by the <u>s</u> <u>State solid waste management plan have been adequately addressed or considered in the plan.</u></u>
- I. Prior to approving the solid waste implementation plan of a municipality, solid waste alliance, or solid waste district, the Secretary must also find that the public has had an appropriate opportunity to participate in the plan's development. This finding shall be based on a demonstration of early and continual efforts by the municipality or district to notify and involve interested and potentially affected members of the public in the decisions being contemplated through the planning process.
- J. Approval of the solid waste implementation plan <u>or amendment</u> by the Secretary <u>shall constitute</u> <u>approval establishes acceptance</u> of <u>solid waste facility</u> siting <u>criteria decisions</u> identified within the plan, unless the approval is expressly qualified or conditioned by the Secretary.

#### Subchapter 5 – General Application Submittal Requirements

#### §6-501 Applicability

- A. Any facility or activity that is required to obtain approval by the Secretary shall do so in accordance with the requirements of this subchapter and subchapter 6. Application submissions for certification, registration, or other approval shall be made in the manner set forth in §6-503 to §6-505 of this subchapter.
- B. <u>Full Certifications</u>: §6-503 of these rules shall govern application submittals for the following facility types:
  - 1. Solid waste storage facilities, transfer facilities and recycling facilities;
  - 2. Large composting facilities under §6-1104(C) of these rules;
  - 3. Interim certifications for solid waste management facilities under 10 V.S.A. §6605b;
  - 4. <u>Treatment, storage or disposal facilities for any waste derived solely or in part from domestic wastes;</u>
  - 5. Regulated medical waste transfer and treatment facilities under Subchapter 14;
  - 6. Landfills; and
  - 7. Any other individual permit issued pursuant to the Secretary's authority under 10 V.S.A. Chapter 159 and these Rules that does not meet the requirements of §6-501(C-D).
- C. <u>Minor Certifications</u>: §6-504 of these rules shall govern application submittals for the following facility types:
  - 1. Categorical solid waste certification under 10 V.S.A. chapter 159 and §6-902 and §6-1002 of these rules; and
  - 2. Medium scale composting certification under 10 V.S.A. Chapter 159 and §6-1104 of these rules.
  - 3. Insignificant Waste Management Event Approvals under §6-504(B)
- D. <u>Registrations and Emergency Approvals:</u> §6-505 of these rules shall govern an application for the following facility and activity types:
  - 1. Small composting facility registration under §6-1104;
  - 2. Organic drop-off facility registration under §6-1202;
  - 3. Anaerobic digester registration under §6-1202; and
  - 4. <u>Issuance of emergency sludge and septage disposal approvals under 10 V.S.A. 6605.</u>

- E. <u>In an individual case, the Secretary may determine to apply the procedures of a Full Certification to the issuance of a minor certification, registration, or emergency approval otherwise subject to the procedures of subdivision (C) or (D) of this section.</u>
- F. In an individual case, the Secretary may require measures in addition to those directed by this subchapter in order to provide notice to other persons potentially affected by the issuance of the certification, registration, or approval.
- G. Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter or operate a solid waste facility as identified in §6 301 of these rules shall file for and obtain certification in the manner set forth in §6 304 and §6 305.
- H. Facilities that qualify for categorical certification under §6-309, categorical composting certification (§6-1105) or categorical recycling certification under §6-1207 shall file an application for categorical certification as required by those sections.

## §6-502 Signatory Requirements

- A. The following individuals shall be co-applicants to a certification, registration, or other request for approval under these rules (if different parties) and shall be bound by the terms of the certification:
  - 1. The facility operator; and
  - 2. The owner of the land on which the facility is located. If the proposed facility is for the management of sludge or septage, the operator may provide a lease for a term consistent with the term of the certification and which does not conflict with the requirements of these rules in lieu of the land-owner signature; and
  - 3. The facility owner.
- B. Applications and all reports requested or required by the Secretary shall be signed in accordance with the following:
  - 1. If the applicant is a corporation, the application shall be signed by a principal executive officer of at least the level of vice-president, or a duly authorized representative who is responsible for the operation of the facility;
  - 2. <u>If the applicant is a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor;</u>
  - 3. If the applicant is a municipality, state, or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.
  - 4. If the applicant is an individual, the application shall be signed by the applicant or by a duly authorized representative of the applicant.

#### §6-503 Full Certification Application Submission

A. Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter, or operate a solid waste facility type described in §6-501(B), shall fully complete sign and submit an application that shall include the requirements of this section, where applicable. If a solid waste management facility includes more than one operational unit (i.e. multiple sites used for the land application of septage or sludge), the application shall provide all required information for all units.

Note: these are the minimum application requirements necessary for all applications under this section. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired for any additional application requirements.

- B. Any person required to obtain certification under §6-303 shall fully complete, sign and submit an application. Additionally along with the appropriate fee to the Secretary.
- C. If the operator does not own the land on which the facility is to be located, the owner of the land must complete and sign the application for certification as a co-applicant and agree to be bound by the terms of the certification. However, if the proposed facility is for the management of sludge or septage, the operator may provide evidence of a lease provided that the term of the lease is consistent with the term of the certification period.
- D. Applications <u>submitted under this section</u> shall be completed under the direction of a professional engineer, licensed in the State of Vermont <u>unless this requirement is specifically waived by the secretary for that application</u>. The engineer shall make appropriate used of other disciplines in order to assure compliance with all applicable standards contained or referenced in these rules. The engineer shall certify that to the best of their information, knowledge and belief the application is in compliance with <u>such</u> standards contained or referenced in these rules.
  - 1. An applicant can request that the Secretary waive this requirement <u>prior to submission of an application</u>. If this a waiver <u>of this requirement</u> is granted <u>by the Secretary</u>, than the applicant is then required to certify that the application is in compliance with <u>such</u> standards <u>contained or referenced in these rules</u>.
- E. A complete application shall include the following:

#### 1. Signatures

- i. If submitted by a corporation, the application shall be signed by a principal executive officer of at least the level of vice president, or a duly authorized representative who is responsible for the operation of the facility;
- ii. If submitted by a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor;
- iii. If submitted by a municipality, state or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.
- 1. <u>An application form, provided by the Secretary, and completed in accordance with the form's instructions and the signature requirements of §6-502. Each application for certification shall be</u>

accompanied by a form provided for this purpose by the Secretary. This form will address and include, at a minimum:

- i. Applicant Information: provide the name mailing address, and phone number of the facility, owner of the facility, operator of the facility and the owner of the land on which the facility is located.
- ii. Contact information (name, mailing address and phone numbers) of the primary and any secondary contact persons for the facility;
- iii. The name, signature, mailing address and phone number of the person preparing the application;
- 2. Identification of the type of solid waste management facility, including all operational units;
- 3. The <u>physical</u> location of the facility, including <u>the</u> 911 address. <u>The physical location shall be</u>, and marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or <u>provided using</u> latitude and longitude coordinates <u>in a noted coordinate system.</u>
- 4. The applicable application fee as specified in 3 V.S.A. chapter 51, subchapter 2 §2822(j).
- 5. Evidence of ownership of facility or property: This shall include a copy of a fee simple title to the property or a lease agreement consistent with §6-502(A)(2). This requirement does not apply to diffuse disposal facilities.
- 6. Evidence of compliance with the disclosure requirements of the waste management personnel background review, see if required by 10 V.S.A. §6605f. for more information
- 7. <u>A demonstration of siting, design and operations information sufficient to show compliance with Subchapter 7 of these Rules and any additional siting, design and operations requirements specific to the type of facility, as provided in Subchapters 9, 10 or 11.</u>
- 8. A facility management plan (FMP), which includes demonstration that the siting, design and operational information for the facility is sufficient to demonstrate compliance with the standards and requirements of these Rules. The FMP must address all operational units and wastes to be managed at the facility along with providing the basis for the operating capacity and growth capacity planned for the facility. At a minimum the FMP must address:
  - i. The number of employees needed to properly operate the facility;
  - ii. The types of vehicles which will use the facility;
  - iii. Vehicle flow at growth capacity;
  - iv. Tipping floor area, if a tipping floor is part of the facility design;
  - v. The type, number and handling capacity of the equipment used;

- vi. Storage capacity at the facility, including the waste transfer schedule;
- vii. The facility's hours of operation;
- viii. Compliance with the requirements of these rules; and
- ix. Any other information relevant to proper operation of the facility
- 9. Evidence that the <u>facility</u>, with the exception of diffuse disposal land application sites, application complies with the planning requirements of 10 V.S.A. §6605(c) is included in a solid waste implementation plan as required by 10 V.S.A. §6605(c). Such evidence may consist of a written supporting statement from the appropriate municipality solid waste management district, solid waste alliance or regional planning commission that identifies the relevant part(s) of the plan(s). This evidence is not required in the case of a sludge or septage land application project.
- 10. Information sufficient, as defined by the Secretary pursuant to 10 V.S.A. Chapter 48, to show that the property on which the facility is located is classified as a Class III or Class IV groundwater area. Solid waste facilities shall not be sited in Class I or II groundwater areas.
- 11. A description of the proposed operation(s), and any future <u>planned</u> development of the facility <u>and any relevant in accordance with the</u> engineering plans.
- 12. A listing of the types and amounts of materials that will be managed at the facility <u>during the certification period</u>.
  - i. For fee considerations, private applicants shall list amounts for the designed growth capacity of the facility and may list an operating capacity. The applicant must request for the operating capacity to be different from the designed growth capacity.
  - ii. Municipal facilities must only provide designed growth capacity estimates
- 13. A contingency action plan which describes the organized, coordinated and feasible course of action that will be followed in cases of emergency or other identifies any potential occurrences which could cause potential endangerment of human health and safety or environmental hazards. This could These occurrences include, but is are not limited to: fires, failure of facility design features (e.g. compactors, leachate collection systems), emergency situations or inability to remove waste as scheduled. The plan shall identify the procedures that will be followed to minimize potential hazards during both planned and unplanned events and provide for continued effective waste management.
- 14. An operator training plan must be developed which provides <u>either classroom or on-the-job</u> <u>training</u> for all facility personnel involved in the handling of waste to receive organized instruction. This instruction shall educate each individual on the procedures necessary for that teaches them to perform their duties <u>safely</u> and in a way that ensures the facility's compliance with all applicable statutes, rules, facility management plans and conditions of certification.
- 15. A closure plan that satisfies the applicable criteria of §6-907; §6-1007, §6-1110 or §6-1309 of these rules, as required for the facility type. The closure plans must include, at least:

- 16. A description of the steps necessary to close the facility;
- 17. A listing of labor, materials, and testing necessary to close the facility;
- 18. An estimate of the expected year of closure;
- 19. A schedule for final closure including, at a minimum, the total time required to close the facility and the time required for the various steps or phases in the closure process;
- 20. A cost estimate for facility closure that satisfies the requirements of § 6-1004;
- 21. A description of the methods for compliance with the closure requirements; and
- 22. Any remedial action necessary prior to closure, if required by the Secretary pursuant to § 6-311.
- 23. A post-closure plan that satisfies the criteria of §6-1008 of these rules.
- 24. A closure and post-closure plan along with cost estimates, unless the application is exempt as described in Subchapter 10.
- 25. Evidence of compliance with the financial responsibility and capability requirements of Subchapter 8 of these Rules, or a plan for achieving compliance with these requirements which will result in compliance prior to the issuance of the draft certification.
- 26. An affidavit providing the names of adjoining landowners and a statement that notice of application has been completed by the applicant. The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:
  - i. A description and location of the proposed activities;
  - ii. A description of the process for review of the application and opportunities for public participation and comment on the application;
  - iii. Contact information (name, mailing address and phone number) for a representative of the Secretary.
- 27. A plan for effective public notice of the application. Such a plan shall include:
  - iv. Provisions for a notice to the general public by advertisement in at least two newspapers of general circulation in the area of the proposed facility. One shall be a regional weekly paper when available.
  - v. A listing of the names and mailing addresses of persons and entities that the applicant is required to notice as follows:
    - a. The legislative body
    - b. All facilities except those specified in subsection (h)(1)(B)(ii), (iii) and (iv) of this section, all residences and landowners within one-half mile radius of the property boundary of the facility or the nearest 100 residences and landowners, whichever

is the lesser number;

- c. Diffuse disposal facilities, all residences and landowners within 500 feet of the proposed diffuse disposal area, and to all adjoining residences and landowners;
- d. For sludge and septage storage and treatment facilities which are located at a wastewater treatment plant, except for those facilities treating the material to achieve PFRP (Process to Further Reduce Pathogens), all adjoining residences and landowners within 1000 feet of the facility; and
- e. For all facilities, except diffuse disposal facilities, whose applications are determined to be minor by the Secretary, all adjoining residence and landowners.
- f. State agency or subdivision
- g. Regional planning commission
- F. Application for Interim Certification. A person who does not qualify for a solid waste management certification under 10 V.S.A. § 6605 may be issued an interim certification under this section.

  Applicants for an interim certification shall submit the following information in addition to the items required by (§6-503 A-E) above: all of the information required in §6-304. In addition, the applicant shall submit:
  - 1. Evidence of the necessity of facility operation and public benefits derived from operation;
  - 2. An assessment of other currently available methods to manage the wastes stored, treated or disposed at the facility;
  - 3. A schedule of the activities that will result in proper closure or full certification of the facility prior to the expiration of the interim certification;
  - 4. Monitoring plans for the groundwater, surface water and air quality of the facility; including summary of any existing data;
  - 5. Evidence that the construction, alteration and continued operation of the facility or the activity is consistent with regional solid waste plans, if any, and the solid waste management plan; and
  - 6. Any other information the Secretary may require.

## §6-504 Minor Application Submissions

- A. Categorical Certification Applications
  - 1. Note: these are the minimum application requirements necessary for all applications under this section. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired for any additional application requirements.

- 2. <u>In order to qualify An application</u> for a categorical certification, an applicant shall submit to the Secretary an application which provides include the following information:
  - i. A description of the activity and operations;
  - ii. Site location map and sketch indicating facility size and layout;
  - iii. Names, mailing addresses and telephone numbers of the owner of the land and the operator of the facility;
  - iv. Hours of operation;
  - v. An estimate of the type and quantity of materials to be received;
  - vi. A letter from solid waste management entity the municipality, municipal alliance or solid waste district serving the town where the facility is located that indicates the facility is acceptable under the solid waste implementation plan, if any;
  - vii. Information addressing compliance with the relevant siting restrictions of Subchapter 7. For the facility type, the Secretary may require additional siting limitations as may be necessary to protect public health and safety or the environment; and
  - viii. Other requirements, as determined by the Secretary and including financial responsibility, if deemed necessary to protect human health, safety, and the environment.
- 3. An affidavit providing the names of adjoining landowners and a statement that notice of application has been completed by the applicant. The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:
  - i. A brief description and location of the proposed activities;
  - ii. A description of the process for review of the application and opportunities for public participation and comment on the application;
  - iii. Contact information (name, mailing address and phone number) for a representative of the Secretary.
- 4. Applicants shall maintain all keep records of all data and any supplemental information used to complete applications and supplemental information submitted to the Secretary for a period of at least six ten years from the data on which the application is signed by the applicant. Such records shall be submitted to the Secretary upon request., unless otherwise authorized by the Secretary.
- 5. The application requirements listed above are the minimum application requirements necessary for all categorical certification applications. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired to determine if there are any additional requirements specific to the management activity.

- 6. Notice: On or before the date of filing any certification application for a facility, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall furnish the Secretary the names of those noticed of the application
- 7. If the Secretary determines that the proposed categorical facility size, processes, activities or nature of the solid wastes requires additional review and oversight that is not provided by this section, the Secretary may require that the applicant apply for a full certification pursuant to \$6-304.
- B. Insignificant Waste Management Event Approvals (IWMEA)
  - 1. <u>An IWMEA provides for a person may to engage in a waste disposal, storage, treatment or processing event of limited duration that will not result in a threat to the public health and safety or to the environment, and will not create a nuisance, without having received a Solid Waste Certification.</u>
  - 2. The following are activities and solid wastes that are eligible for management under an IWMEA:
    - i. <u>Limited duration disposal of:</u>
      - a. stumps, root masses, decomposing wood or brush, or untreated wood;
      - b. bituminous concrete;
      - c. concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;
      - d. street sweepings;
      - e. clogged septic stone;
      - f. pilot scale experimental facilities for the management of sanitary wastes; and
      - g. other solid wastes that will not result in a threat to the public health and safety or to the environment and will not create a nuisance.
    - ii. Collection Events for:
      - a. Electronics;
      - b. HHW/CEG materials; and
      - c. Paint.
  - 3. In order to obtain written approval for an insignificant waste management event, applicants must submit a written request a properly completed form provided by the Secretary which, at a minimum, addresses the following items:
    - i. Contact information (name, address, phone number) for the applicant;

- ii. Description of the solid waste being managed and approximate volumes;
- iii. Site location
- iv. Evidence that the activity will not occur in a prohibited area (see §6 \*\*\*) and will meet necessary isolation distances: (see §6-\*\*\*).

#### §6-505 Registrations and Emergency Approval Submissions

- A. A person seeking approval under this section shall submit an application/notification that shall include the following minimum requirements of this section, where applicable:
  - 1. Content requirements for a small composting facility as described in §6-1108(A)
  - 2. Content requirements for an organic drop-off facility as described in §6-1206(A)
  - 3. Content requirements for an on-farm anaerobic digester as described in §6-1206(B)
  - 4. Content requirements for emergency approvals, sludge and septage disposal as described in 10 V.S.A. 6605.

#### §6-506 Application for Variance from Solid Waste Rules Submissions

- A. Any person who owns or is in control of any building, structure, process, or equipment may apply to the Secretary for a variance from these Rules in accordance with this section. In no case shall a request for a variance from these Rules be considered a contest case under 3 V.S.A. §809.
- B. For variances sought for facility exemption from the collection of leaf and yard residuals and/or food residuals shall be made as provided for by 10 V.S.A. §6613(b).
- C. With the exception of variances sought under 10 V.S.A. §6613(b), an application for a variance from these Rules shall contain, at a minimum:
  - 1. The specific rule from which the variance is sought, a statement by the applicant of why a variance is needed and the grounds, pursuant to 10 V.S.A §6613, upon which the variance is sought.
  - 2. A concise statement of the relief sought and the reasons therefore.
  - 3. <u>Information demonstrating that the alternate standard or process will not endanger or tend to endanger human health or safety.</u>
  - 4. <u>Information demonstrating serious hardship from compliance with the rule without equal or greater benefit to the public (e.g. cost benefit analyses, profit and loss statements, balance sheets, federal income tax returns, and other documentation as necessary)</u>
  - 5. A schedule for obtaining compliance with the rule in question, unless the request is for a permanent variance from the siting requirements of rules adopted pursuant to chapter 159 of title

- 6. <u>Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act.</u>
- 7. An affidavit providing the names of adjoining landowners and a statement that notice of application has been completed by the applicant. The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:
  - i. A brief description of the rule from which the variance is being sought;
  - ii. the location of the proposed activity;
  - iii. A description of the process for review of the application and opportunities for public participation and comment on the application;
  - iv. Contact information (name, mailing address and phone number) for a representative of the Secretary.
- D. <u>Applicants shall maintain all records of data and any supplemental information used to complete applications for a period of at least ten years from the data on which the application is signed by the applicant.</u> Such records shall be submitted to the Secretary upon request.

## **Subchapter 6 – Application Review and Certification Issuance**

#### §6-601 Full Certification Review Process

- A. Following the submission of an application for full certification and a signed affidavit that the notice of application has been completed, the Secretary shall begin review of the application by the following process:
  - 1. Within 15 days of the receipt of an application under this section, the Secretary shall determine if the application is administratively complete. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
    - i. If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. The notification under this section shall identify each deficiency in the application that resulted in the Secretary's decision.
    - ii. Upon determination that the application has submitted all requirements of §6-503, the Secretary shall provide notice of an administratively complete application through the Environmental Notice Board (ENB) or other web-based public notice service provided by the Department of Environmental Conservation. The notice will include:
      - a. The name and contact information for the person at the Agency processing the application;
      - b. The name and address of the applicant;
      - c. The name and physical address of the facility or activity which is the subject of the application;
      - d. A brief description of the proposed activity(ies) to be permitted; and
      - e. The length of the period for submitting written comments, the process for submitting those comments, and notice of the requirement to submit comments during that period in order to seek administrative reconsideration of the Secretary's decision or appeal under 10 V.S.A. chapter 220.
  - 2. Technical review: Following a determination of administrative completeness under §6-601(A)(1) above, the Secretary shall determine whether the application conforms to all applicable provisions of these rules and 10 V.S.A. Chapter 159.
    - i. <u>If the Secretary determines that an application is incomplete under this subsection, the Secretary provides notice of the Secretary's intent to deny the application through the ENB or other web-based public notice service provided by the Department of the Secretary's intent to deny the application through the ENB or other web-based public notice service provided by the Department of</u>

#### Environmental Conservation.

- ii. Upon a determination that an application is complete under this subsection, the Secretary shall provide notice of the Secretary's draft decision through the ENB or other web-based public notice service provided by the Department of Environmental Conservation. This notice will include:
  - a. all the information required by §6-601(A)(1)(ii) above;
  - b. the Secretary's draft decision on the application and the basis for that decision;
  - c. <u>all documents and information on which the Secretary relied in issuing the draft decision;</u>
  - d. <u>information providing for no less than a 30-day public comment period on the Secretary's draft decision; and</u>
  - e. the process for requesting a public meeting on the application.
- 3. Comment period; public meeting: Upon request by any person, or upon the Secretary's own motion, the Secretary shall hold a public meeting on the Secretary's draft decision. Such request or motion shall be made within 14 days of the posting of the notice of the Secretary's draft decision made pursuant to \$6-601(A)(2)(ii) above.
  - i. The Secretary shall provide at least 14 days' notice of a public meeting through the ENB or other web-based public notice service provided by the Department of Environmental Conservation. The notice shall include:
    - a. the time, date, and location of the public meeting;
    - b. a brief description of the nature and purpose of the meeting;
    - c. the date the Secretary gave notice of an administratively complete application;
  - ii. When the Secretary holds a public meeting under this section, the Secretary shall hold the period for written comments open for at least seven days after the date the hearing is held.
- 4. Notice of final decision; response to comments.
  - The Secretary shall provide a response to all comments received during the public comment period, including any comments submitted during a public meeting. The Secretary shall provide a response to each comment received during the comment period and the basis for the response. The Secretary shall also specify each provision of the draft decision that has been changed in the final decision and the reasons for each change.

These responses shall be posted on the ENB or other web-based public notice service provided by the Department of Environmental Conservation as a part of the final decision.

- 5. The Secretary shall provide notice of and post the final decision through the ENB or other webbased public notice service provided by the Department of Environmental Conservation and provide a copy of the final decision to all commenters. Secretary's final decision on an application shall include:
  - i. all the information required by §6-601(A)(1)(ii) above;
  - ii. the Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in §6-601(2)(ii) above;
  - iii. a concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision; and
  - iv. all documents and information on which the Secretary relied in issuing the decision, including the response to comments as required in §6-601(4) above.
  - v. notice on how the decision may be appealed and the period for filing an appeal
- 6. The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.
- A. Interim certification procedures shall be identical to the procedures set forth in §6-305 for a full certification, except that where the applicant cannot demonstrate that the facility qualifies for a facility certification pursuant to §6-304. The Secretary may issue an interim certification subject to the findings and conditions established in 10 V.S.A. §6605b.
- B. Within 15 days of the receipt of a certification application, the Secretary shall review the application for administrative completeness. The applicant shall be notified, in writing that the application is either administratively complete or incomplete.
  - 1. If the Secretary determines that the application is administratively incomplete, the Secretary shall specify what information is missing or lacking and state that the Secretary's technical review of the application will begin only when it is determined to be complete.
- C. Upon the Secretary's determination that an application, including the plan for public notice required by \$6-304(h), is administratively complete, the applicant shall:
  - 1. provide public notice of the application in accordance with their submitted plan and;

- 2. ensure that a complete application is on file with the municipality where the facility is to be located. This must occur prior to the posting of the public notice and the application must remain on file throughout the full certification process.
- D. The period for the receipt of public comment on the notice of application shall end no sooner than 15 days after the date of the latest newspaper publication date. The applicant shall provide a printed copy of the newspaper notices to the Secretary and a certificate of service from the post office.
- E. Technical Review: The Secretary shall review the application for conformance with these rules, as well as other applicable requirements of 10 V.S.A. Chapter 159. In conducting this review, the Secretary shall take into consideration the comments received.
- F. The Secretary shall inform the applicant, in writing, of the Secretary's determination that the application conforms or does not conform with this subchapter the Solid Waste Rules
  - 1. If the application conforms with the Rules; The secretary shall issue a fact sheet, briefly setting forth the basis of the draft certification and the draft certification.
  - 2. If the application does not conform to these rules or any other applicable requirement of 10 V.S.A. Chapter 159, a written denial shall be sent to the applicant along with the reasons for the denial.
- G. Copies of the fact sheet and draft certification shall be sent to the applicant, to the municipalities, solid waste districts, regional planning commissions, and any other state agencies or subdivision thereof who received the notice of application under § 6-304(h) and to any other person who, in writing, requests the document.
- H. The Secretary shall provide notice, by advertisement in at least two newspapers of general circulation in the area of the proposed facility, one of which shall be a regional weekly newspaper if one is available, of the issuance of each draft certification, and of the opportunity for public comment. The period for receipt of public comments shall be specified in the notice and shall end no sooner than 22—14 days following the notice or 14 days following a public informational meeting, if one is held pursuant to subsection (a)(9) of this section, whichever date is later. This notice must include information on how and where the public may obtain copies of pertinent documents. Such documents must be available at reasonable times and expense.
- I. The Secretary shall hold a public information meeting to receive comment on the draft certification if it is requested within the public comment period specified in subsection (a)(8) of this section through petition by the selectmen of any town, the trustees of an incorporated village, a city council, the appropriate officials of affected Agencies or subdivision thereof, or 25 or more citizens from within the municipality or adjacent municipalities where the facility is located. The Secretary may also hold a public informational meeting on his or her own motion. The Secretary shall provide public notice of the date and purpose of any such informational meeting by advertisement in at least two newspapers of general circulation in the area of the proposed facility, one of which shall be a regional weekly newspaper if one it available. Any public informational meeting shall be held no sooner than 14 days

after the date of the public notice required by this subsection.

- J. Prior to the issuance of a final certification, the Secretary shall prepare a summary of the comments with responses noting all changes to the draft certificate with reasons stated for those changes. If the issuance of a final certification is denied, the Secretary shall send a written denial to the applicant, which shall explain the reason(s) for the denial.
- K. When issuing draft or final certifications, the Secretary may impose any conditions, requirements or restrictions as deemed necessary to assure compliance with statutes, rules or to protect public health and safety and the environment.

#### **§6-602** Minor Certification Review Process

- A. Following the submission of an application for a minor certification, the Secretary shall begin review of the application by the following process:
  - 1. Administrative completeness review
    - i. Within 15 days of receipt of an application submitted under this section, the Secretary shall determine if the application is administratively complete. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
      - a. If, within 15 days of receipt, the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. The notification under this section shall identify each deficiency in the application that resulted in the Secretary's decision.
      - b. Upon determination that the application has met the requirements of §6-504 the Secretary shall provide notice of an administratively complete application through the Environmental Notice Bulletin.
    - ii. A notice of completeness made under this section shall include:
      - a. The name and contact information for the person at the Agency processing the application for certification;
      - b. The name and address of the applicant;
      - c. The name and address of the facility or activity which is the subject of the application; and
      - d. A brief description of the activity to be approved.

## 2. Technical review

i. <u>Following the posting of a determination of completeness under §6-602(A)(1)(ii) above, the Secretary shall determine whether the plan conforms to all applicable provisions of these rules, and 10 V.S.A. chapter 159.</u>

- a. If the Secretary determines that an application is incomplete under this subsection, the Secretary shall provide notice of the Secretary's intent to deny the application through the ENB or other web-based public notice service provided by the Department of Environmental Conservation.
- b. Upon a determination that an application is complete under this subsection, the Secretary shall provide notice of the Secretary's draft decision through the ENB or other web-based public notice service provided by the Department of Environmental Conservation.
- ii. A notice provided under (a) or (b) of this section shall include:
  - a. all the information required by §6-602(A)(1)(ii);
  - b. the Secretary's draft decision on the application and the basis for that decision;
  - c. <u>all documents and information on which the Secretary relied in issuing the draft decision;</u> and
  - d. <u>information providing for no less than a 14-day public comment period on the Secretary's draft decision.</u>
- 3. Notice of final decision; response to comments.
  - i. The Secretary shall provide a response to all comments received during the public comment period. The Secretary shall provide the response to all commenters, and shall post the response to comments on the ENB or other web-based public notice service provided by the Department of Environmental Conservation as a part of the final decision.
  - ii. The Secretary shall provide notice of a final decision through the ENB or other web-based public notice service provided by the Department of Environmental Conservation and shall post the final decision to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. The Secretary's final decision on an application shall include:
    - a. all the information required by §6-602(A)(2)(ii) above;
    - b. the Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in §6-602(A)(2)(ii) above;
    - c. <u>a concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision; and</u>
    - d. all documents and information on which the Secretary relied in issuing the decision, including the response to comments as required in §6-602(A)(3)(i) above.
- B. The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

- A. Applications for recertification which the Secretary may determine to be minor include, but are not limited to, the following:
  - 1. Minor expansions of, or changes to, currently certified facilities;
  - 2. Amendments to diffuse disposal facility certification where not more than 25% of the acreage used for diffuse disposal is changed;
  - 3. recertification of facilities, or amendments to current certifications, for facilities regulated under Subchapter 12 of these rules;
  - 4. recertification of facilities, or amendments to current certifications, for food and yard waste composting facilities not otherwise regulated under Subchapter 11 of these rules;
  - 5. recertification of facilities, or amendments to current certifications, for construction and demolition debris treatment and processing facilities; or
  - 6. recertification of facilities, or amendments to current certifications, for facilities previously certified under the minor application process.
- B. An application may be deemed to be minor if the Secretary determines that, given the nature of the facility, scale of the operation and kinds of activities, the facility for which the certification application is made will not pose a significant threat to public health and safety or the environment or cause a nuisance.
- C. With the exception of recycling facilities, application for certification of solid waste management facilities not previously certified may not be deemed minor by the Secretary.
- D. Recertification of solid waste incinerators and solid waste discrete disposal facilities, with the exception of post-closure certifications, shall not be deemed minor by the Secretary.
- E. Within 15 days of the receipt of a certification application, the Secretary shall review the application for administrative completeness, and shall notify the applicant in writing that the application is either administratively complete or incomplete and whether the application will be reviewed according to the procedures set forth in this section. If the Secretary determines that the application is administratively incomplete, the Secretary shall specify what information is missing or lacking and state that the Secretary's technical review of the application will begin only when it is determined to be administratively complete.
- F. Upon the Secretary's written determination that an application for a minor certification conforms with the rules the applicant shall provide notice, pursuant to §6-304(h)(1) that:

## §6-603 Registration and Emergency Approvals

A. Notice of final decision.

- 1. The Secretary shall review the registration or emergency approval submittals for completeness;
- 2. The Secretary shall provide notice of a final decision through the ENB or other web-based public notice service provided by the Department of Environmental Conservation and shall post the final decision to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. The Secretary's final decision on an application shall include:
  - i. the Secretary's final decision to either grant or deny the application/request;
  - ii. a concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision; and
  - iii. all documents and information on which the Secretary relied in issuing the decision.
- 3. The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

## §6-604 Variance Review Process

- A. The review process for variance applications will be the full certification review process as provided in §6-601.
- B. Prior to the determination that the application for a variance is administratively complete, and at the discretion of the Secretary, in accord with 10 V.S.A. §6613, the processing of a variance application may be delayed when an applicant for a variance or renewal, is not in compliance with an administrative order or an assurance of discontinuance with respect to a violation that is directly related to the activity which is the subject of the application.
- C. The Secretary shall only grant a variance from these rules upon finding that the requirements of 10 V.S.A. §6613(a) and (b) have been met.
- D. <u>Variances shall be issued with conditions and for a time period consistent with the reasons for the variance and consistent with the provisions of 10 V.S.A. §6613(c), as applicable.</u>
- E. A variance shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. At a minimum, variance approvals, denials, or renewals shall contain the following:
  - 1. An opinion detailing the factual findings that are the basis of the approval, denial or renewal;
  - 2. the conclusions of the Secretary on how the variance meets the requirements of 10 V.S.A. §6613, as applicable;
  - 3. any conditions necessary for the approval or renewal of the variance;
  - 4. any other discussion the Secretary deems necessary; and

- 5. <u>a summary of responses to comments from the public on the variance application.</u>
- F. Any variance granted may be renewed on terms and conditions and for periods, which would be appropriate on initial granting of a variance. A variance renewal shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. If complaint is made to the Secretary on account of the variance, no renewal thereof shall be granted, unless following public notice and an opportunity for a public meeting on the complaint, the Secretary finds that renewal is justified. The application for renewal shall be made at least 60 days prior to the expiration of the variance.

#### §6-605 Document Retention After Issuance

- A. Applicants shall <u>maintain all keep</u> records of <u>all</u> data <u>and any supplemental information</u> used to complete applications <del>and supplemental information submitted to the Secretary</del> for a period of at least <u>six ten</u> years from the data on which the application is signed <u>by the applicant</u>. <u>Such records shall be submitted to the Secretary upon request. <u>unless otherwise authorized by the Secretary</u>.</u>
- B. Applicants shall maintain a copy of the current facility management plan and issued certification at the facility. These documents shall be accessible by all facility personnel during hours of operations.

## §6-606 Amendments and Renewals

- A. <u>Amendments of Certifications</u>: The Secretary may amend a certification issued under these rules on his or her own motion or upon written request by the holder of the certification.
- B. A written request shall identify the terms of the current certification to be amended by the request, and a justification of need for the proposed amendment. The applicant shall provide any revised or updated application materials in support of the proposed amendment, and any other information the Secretary requires for review. The Secretary shall determine whether the proposed amendment shall require a major, minor, or administrative amendment.
  - 1. A major amendment shall be subject to the same application and procedural requirements applicable to the original decision under this subchapter.
  - 2. A minor amendment shall be subject to the minor certification procedural requirements, except that the Secretary need not provide notice of the administratively complete application.
  - 3. An administrative or "de minimis" amendment of a certification issued under these rules shall not be subject to the application and procedural requirements of this subchapter
- C. If the Secretary determines that amendment is appropriate, only the conditions subject to the amendment shall be modified. Until amendments are finalized and the amended certification is issued, the terms and conditions of the original certification shall remain in force.
- D. Renewal of certifications: A person may renew a certification under the same application and procedural requirements applicable to the original decision under this subchapter.

#### §6-607 Suspension and Revocation of Certifications and Registrations

- A. <u>Authority</u>. The Secretary may suspend or revoke a certification, or registration issued under this subchapter upon his or her own motion or upon receipt of a written petition for suspension or revocation.
- B. Petition for suspension or revocation. Petitions for revocation or suspension shall be addressed to the Secretary, and shall include the following information:
  - 1. The name, address, and telephone number of the petitioner;
  - 2. A statement of the petitioner's interest in the matter;
  - 3. The alleged basis for suspension or revocation of the Certification under subsection (C) of this section, along with any facts in support of such suspension or revocation under these rules; and
  - 4. The signature of the petitioner.
- C. <u>Basis for suspension or revocation</u>. The following shall be bases for suspension or revocation of a <u>certification</u>, or <u>registration</u>:
  - 1. <u>Violation of a condition imposed in the certification, or registration as issued;</u>
  - 2. <u>Violation or failure to comply with the provisions of these rules or any authorizing statutes;</u>
  - 3. False or misleading information submitted in support of an application or request for approval;
  - 4. A petition to suspend or revoke submitted by the holder of the certification, or registration; or
  - 5. A determination by the Secretary that the suspension or revocation of the certification, or registration is necessary to prevent:
    - i. actual substantial harm to the public health, public safety, or the environment, or
    - ii. <u>an imminent and substantial threat of harm to the public health, public safety, or the environment.</u>
- D. Notice of suspension or revocation. The Secretary shall provide notice of the suspension or revocation to the holder of the certification, or registration and post the notice to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. Except as provided in (E) of this section, such notice shall be provided at least 14 days prior to the date when the suspension or revocation takes effect. The notice shall include:
  - 1. The legal authority for the proposed action;
  - 2. A brief statement of the facts upon which the proposed action is based;
  - 3. The effective date of suspension or revocation of the certification, plan, or registration; and
  - 4. <u>Notification of the permittee's right to, within 30 days of receipt of the written notification,</u> request a hearing to present information in response to the notice for suspension or revocation.
- E. Finding of harm; threat of harm. If the Secretary determines that immediate suspension or revocation of a certification, or registration is necessary to prevent actual substantial harm or an imminent and

substantial threat of harm to the public health, public safety, or the environment under §6-607(C)(5), the suspension or revocation shall become effective upon the receipt of the Secretary's notice under (D) of this section. The suspension or revocation shall be effective until any requested hearing has been completed and a final decision issued by the Secretary.

- F. Hearing; request. Upon request for a hearing made within 30 days of receipt of the Secretary's notice of suspension or revocation, the Secretary shall hold a hearing on the decision for suspension or revocation of the certification, plan, or registration. The failure to request a hearing within 30 days of receipt of the Secretary's notice shall constitute a waiver of the right to a hearing on the petition.
- G. Party status. The Secretary shall determine the right of the petitioner or any other persons requesting party status to participate in the proceedings. In determining party status, the Secretary shall consider whether a person or his or her property is directly affected by the facility or activity(ies) authorized in the certification, or registration. The Agency shall automatically be a party to the proceeding.
- H. Burden; admissibility of evidence. The hearing in a contested case shall be conducted by a hearing officer appointed by the Secretary. The burden of establishing that the certification, or registration should be suspended or revoked shall be upon the party petitioning for suspension or revocation under this section. The admissibility of evidence in proceedings under this section shall be determined under the criteria set forth in 3 V.S.A. §810.
- I. Recording. Upon request of the party, a hearing held under this section shall be transcribed by a qualified stenographer or recorded on an electronic sound device. If a transcription by a stenographer is requested, the request shall be made in writing at least 10 days prior to the scheduled hearing. Costs shall be borne by the requesting party. The requesting party shall provide one copy of the transcript to the Secretary without costs; other parties wishing to obtain a copy of the transcript shall reimburse the requesting party on a prorated basis.
- J. Examination of evidence; decision and order. The examination of evidence, decision and order shall be governed by the provisions of 3 V.S.A. 811 and §812. The final decision shall be made by the Secretary within 30 days after the close of the hearing. The decision shall constitute the final decision of the Secretary. Copies of the decision shall be sent to the holder of the certification, plan, or registration, and other parties to the proceeding.

#### **Categorical Certification Notice**

A. On or before the date of filing any certification application for a facility, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall furnish the Secretary the names of those noticed of the application.

# **Certification or Approval Issuances**

A. Full and Minor Certifications

1. Prior to the issuance of a final certification, the Secretary shall prepare a summary of the comments with responses noting all changes to the draft certificate with reasons stated for those changes. If the issuance of a final certification is denied, the Secretary shall send a written denial

to the applicant, which shall explain the reason(s) for the denial.

- When issuing draft or final certifications, the Secretary may impose any conditions, requirements
  or restrictions as deemed necessary to assure compliance with statutes, rules or to protect public
  health and safety and the environment.
- 3. Certification shall be for a period not to exceed 10 years, except for a sanitary landfill or a household hazardous waste facility which shall not exceed five years.

#### **B.** Categorical Certifications

1. <u>Upon determining that the proposed facility is in conformance with the Rules a certification will be issued.</u>

## C. Insignificant Waste Management Event Approvals

1. <u>Upon determining that the proposed event is in conformance with the Rules an approval will be issued.</u>

#### **D.** Interim Certifications

- 1. An interim certification shall be valid only for a period of time, not to exceed two (2) years, for an applicant to meet the requirements of full certification or closure.
- 2. An interim certification may not be renewed more than once.
- 3. An interim certification shall contain, at a minimum, all provisions required by 10 V.S.A. §6605b(c)

#### E. Variance Approval

- 1. <u>Variances shall be issued with conditions and for a time period consistent with the reasons for the variance and consistent with the provisions of 10 V.S.A. §6613(c). A variance or renewal shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. At a minimum, variance approvals, denials, or renewals shall contain the following:</u>
  - i. An opinion detailing the factual findings that are the basis of the approval, denial or renewal; the conclusions of the Secretary on how the variance meets the requirements of 10 V.S.A. §661; any conditions necessary for the approval or renewal of the variance; and any other discussion the Secretary deems necessary.
  - ii. A summary of responses to comments from the public on the variance application.
- 2. An application for renewal of a variance shall be made at least 60 days prior to the expiration of the variance.

3. Any variance granted pursuant to 10 V.S.A. §6613(c) may be renewed on terms and conditions and for periods, which would be appropriate on initial granting of a variance. A variance renewal shall not be a right of the applicant or holder thereof but shall be in the discretion of the Secretary. If complaint is made to the Secretary on account of the variance, no renewal shall be granted, unless following public notice and an opportunity for a public meeting on the complaint, the Secretary finds that renewal is justified.

#### **Amendments of Certifications**

- A. Any certification or interim certification issued pursuant to these rules may be amended, in whole or in part, during its term for cause, including, but not limited to:
  - 1. material and substantial additions or alterations to the facility or the facility's activities or any other change in conditions, that occurred after certification which justify the application of conditions different or absent from the existing certification;
  - 2. the receipt of information that was not available when the certification was issued which justifies the application of conditions different or absent from the existing certification;
  - 3. the statutes, standards or rules, on which the certification was based, were revised by adoption or judicial decision after the certification was issued and those revisions justify the application of conditions different or absent from the existing certification;
  - 4. the determination by the Secretary that other good cause exists for amendment, necessary to protect the public health and safety and the environment;
- B. The Secretary may amend any certification or interim certification upon their own motion or upon a written request by the certification holder containing the facts and reasons supporting the request.
- C. If the Secretary determines that an amendment is appropriate, only the conditions subject to the amendment shall be reopened. All amendments under this section shall be performed in accordance with the procedures and requirements of these rules.
- D. Until amendments are granted or denied, in whole or in part, all the terms and conditions of the original certification shall remain in full force and effect.
- E. The Secretary may make *de minimis* modifications to a certification, as an administrative amendment, without following the procedures set forth in these rules where the Secretary determines that the modifications pose no threat to public health and safety or to the environment and will not create a nuisance.

#### **Revocations of Certifications**

A. A certification or interim certification may be suspended or revoked, in whole or in part, during its term for cause upon a motion by the Secretary upon a written request containing facts and reasons supporting the request. Cause for suspension or revocation includes:

- 1. non-compliance with the requirements of 10 V.S.A. Chapter 159, these rules, or any condition of certification:
- 2. failure to disclose all relevant facts during the certification process that were known or should have been known, at that time;
- 3. misrepresentation of any relevant fact at any time; or
- 4. a determination by the Secretary that only the suspension or revocation of a certification or interim certification can alleviate an actual or potential hazard to public health or the environment.
- B. The certification holder shall be given written notice at least 14 days before suspension or revocation takes place. This written notice shall include a statement of the reasons for suspension or revocation and notice of the certification holder's right to request a hearing or otherwise present information on the suspension or revocation issues.
- C. If the certification holder submits a written request for a hearing within 14 days of the data that such notice is issued, the Secretary shall provide an opportunity to be heard.
- D. If the Secretary determines that only immediate suspension or revocation of a certification or interim certification can alleviate an immediate and substantial hazard to public health and safety or the environment, suspension or revocation shall become effective upon receipt of the written notice by the applicant
  - 1. In such cases the certification holder may still request a hearing, although the suspension or revocation will be in effect until the hearing has been completed and a decision has been issued. The Secretary shall hear the matter at the earliest possible time.

#### Subchapter 7 – General Siting, Design and Operating Standards

#### **§6-701** General

The requirements of this Subchapter apply to all solid waste management facilities with the exception of those facilities that meet the requirements for categorical certifications. The requirements of this Subchapter are the minimum requirements and additional requirements specific to the type of solid waste facility are presented in the relevant facility specific subchapters.

#### §6-702 Prohibited Areas

- A. Facilities are prohibited from being sited in the following designated areas:
  - 1. Class I and Class II Groundwater Areas:
  - 2. Class I and Class II wetlands and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless a Conditional Use Determination has been issued by the Agency;
  - 3. Class III wetlands as and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless a Conditional Use Determination has been issued by the Agency;
  - 4. Class III wetlands, as defined by the Vermont Wetlands Rules, unless a Water Quality Certification has been issued pursuant to 40 CFR Part 401, or has been waived by the Agency;
  - 5. A National Wildlife Refuge as designated by the United States Fish and Wildlife Service;
  - 6. A wildlife management area as designated by the Agency;
  - 7. A threatened or endangered species habitat area as designated by the Agency, except for diffuse disposal facilities;
  - 8. Floodways, mapped fluvial erosion hazard zones;
  - 9. Within 100-year flood plains, except for land application sites as provided in §6-1305(E);
  - 10. A watershed for a Class A Waters, as designated by the Vermont Water Resources Board or the Natural Resources Board; and
  - 11. Within 500-feet of an Outstanding Resource Water as designated by the Vermont Water Resources Board or the Natural Resources Board. This criterion does not apply to previously certified Subchapter 12 storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.

## §6-703 Siting Standards

- A. Facilities shall be located such that an emission or discharge from the facility will not unduly harm the public health and safety and will have the least possible reasonable impact on the environment.
- B. <u>An applicant</u> In order to meet the general performance standard of subsection (a) of this section, the operator must satisfactorily demonstrate the following:
  - 1. The isolation distances from the high seasonal water table, bedrock and surface waters are sufficient to assure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and rules;
  - 2. That The isolation distance to public and private drinking water sources is sufficient to assure that an emission or discharge from the facility will not adversely affect drinking water;
  - 3. That The isolation distances to property lines or any residence, school, day-care facility, hospital or nursing home, not owned by the applicant, are sufficient to assure that the facility will not:
    - i. Result in objectionable odors off site;
    - ii. Result in an unreasonable visual impact off site;
    - iii. Unreasonably increase the level of noise detectable off site; or
    - iv. Otherwise adversely affect public health
  - 4. That The minimum isolation distances for the facility or activity listed in Table A are met, or significantly increased, to make the demonstrations required under §6-703B(1-3) subdivisions (1), (2), and (3) of this subsection. Any facility which is not listed in Table A, shall have an isolation distance to property lines of at least 50 feet.
  - 5. That the facility is not located in areas that have serious development limitations, such as highly erodible soils, steep slopes, or do not have the physical capability to support the facility;
  - 6. That the facility is accessible from a state or federal highway or a Class III or better town highway;
- C. The Secretary may request any additional information necessary to determine if a proposed facility meets the standards contained in this section.

Table A: Required minimum isolation distances.

CATEGORY	Minimum Distances By Facility Type			
	Diffuse D Injection	isposal <sup>1</sup> Other	Landfills <sup>2</sup>	Storage, Transfer, and Recycling Facilities
Minimum vertical separation from high seasonal water table <sup>3</sup>	3'	3'	6'	n/a
Minimum vertical separation to bedrock	3'	3'	10'	n/a
Minimum distance to waters from the waste management boundary	50'	100'	300'	100' 4
Minimum distance from waste management boundary to drinking water source not owned by the applicant.	300'	300'	1000'	100' 4
Minimum distance to property line from waste management boundary	25'	50'	300'8	50'6
Minimum distance from waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes, not owned by the applicant	100'	100'	1000'5	100'7

<sup>&</sup>lt;sup>1</sup> Diffuse disposal, or land application, applies to sludge and septage distributed over an area of land at a controlled rate to make efficient use of its nutrient and/or soil amendment value.

<sup>&</sup>lt;sup>2</sup> Minimum criteria for a discrete disposal <u>landfill</u> facility are based on underlying soils with a maximum permeability of 1 x 10<sup>-4</sup> cm/sec. <u>Discrete disposal Landfill</u> sites with more permeable soils will be evaluated on a case by case basis, but are generally not acceptable.

<sup>&</sup>lt;sup>3</sup> For diffuse disposal the three-foot minimum vertical separation shall be measured from the ground surface, or bottom of the zone of incorporation, to the saturated zone existing at the time of disposal. For discrete disposal <u>facilities</u> the vertical separation shall be measured from the bottom of the discrete disposal facility <u>landfill</u> liner system to the seasonal high groundwater table.

<sup>&</sup>lt;sup>4</sup> These criteria apply only to facilities constructed after July 1, 1998 or to modifications after July 1, 1998 of existing facilities. This criteria applies for all facilities constructed after the effective date of these rules and for facilities constructed prior to the effective date of these rules where expansions or modifications result in a reduction in the isolation distance to a drinking water source.

<sup>&</sup>lt;sup>5</sup> These criteria apply only to certifications issued after October 15, 2004 for new discrete disposal facility landfill units or lateral expansions of previously certified existing discrete disposal facility landfill units.

<sup>&</sup>lt;sup>6</sup> These criteria apply only to facilities constructed after July 1, 1998. The Secretary may approve a distance which is less than 50 feet if the operator makes a satisfactory demonstration under § 6-703(B)(3).

<sup>&</sup>lt;sup>7</sup> These criteria apply only to initial certification of new facilities or modifications of existing facilities certified after October 1, 2004.

<sup>&</sup>lt;sup>8</sup> These criteria apply only to certifications issued after October 15, 2004 for new discrete disposal facility landfill units or lateral expansions of previously certified discrete disposal facility landfill units. The minimum distance to the property line is 50 feet for discrete disposal facility landfill units certified prior to October 15, 2004. This These criteria does not apply to any facility located on or adjacent to property sought by a solid waste district through an eminent domain proceeding, pursuant to 24 V.S.A. § 2299a et seq., which was initiated prior to June 24, 2002, provided that the district that demonstrated the necessity in the eminent domain proceeding acquired the property. The minimum distance for such municipal facilities shall be 100 feet.

## §6-704 Site Characterization and Facility Design

- A. Design of all solid waste management facilities shall be addressed in a facility management plan (FMP) that contains a basis of design and an operating plan for all facility components. The plan shall contain sufficient information for to permit the Secretary to determine whether the facility conforms to the provisions of these rules. This These requirements shall not apply to facilities that meet the requirements for categorical certification.
- B. The facility management plan documentation shall be prepared under the direction of an engineer, licensed in the State of Vermont, unless the Secretary specifically <u>approves a waiver of this waives the</u> requirement that an engineer be involved.
- C. The engineer shall make appropriate use of available expertise for evaluating geology and hydrogeology, soils science, air pollution control and impacts, and other areas of specialized knowledge which may be required to <u>design the facility</u>. <u>assemble a facility management plan.</u>
- D. Facility <u>design management plans</u> shall provide for reliable means to control vectors, emissions or discharges including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.
- E. Except for facility management plan documents prepared for facilities regulated under Subchapter 12 of these rules, this document shall include information necessary to fully characterize the site and the facility operation. Such site characterization shall be <u>be</u> adequate to determine all mechanisms of emission or discharge to the environment and to allow modeling of contaminant transport with a level of resolution sufficient to determine compliance with applicable environmental quality standards (e.g., drinking water, surface water or groundwater quality, or air quality standards). At a minimum the site characterization must address:
  - 1. Soils and surficial geology;
  - 2. Bedrock geology;
  - 3. Integrated groundwater geology and geochemistry;
  - 4. Topography;
  - 5. Surface water;
  - 6. Groundwater location and flow direction;
  - 7. Air quality; and
  - 8. Airshed characteristics such as prevailing wind speed and direction, meteorology, and climatology

#### §6-705 Operational Standards

- A. Operational requirements are provided below for all solid waste management facilities. Facilities which qualify for categorical <u>disposal</u>, <u>categorical recycling or compost</u> certification, are exempt from the provisions of this <u>subchapter subsection</u>, but <u>there are facility specific have</u> operational requirements <u>applicable to those facilities</u> contained within the provisions of those <u>relevant subchapters sections</u>:
  - 1. Adequate and qualified personnel must be retained to operate solid waste management facilities.
  - 2. Before a solid waste management facility may commence operations, a professional engineer licensed in the State of Vermont must certify it was built in accordance with requirements of the certification and furnish a complete set of as built drawings to the Secretary. Upon written request of the applicant, the Secretary may waive the requirement that the certification referred to above be furnished by a professional engineer.
  - 3. Owners and operators of a solid waste management facility shall adhere to all conditions of the facility certification and these rules.
  - 4. At least one (1) contact person identified in the certification application shall be on-site during all hours of operation, unless specifically waived by the Secretary, in which case a contact person must nevertheless be able to be contacted at all times.
  - 5. All sampling must be performed by properly trained and qualified personnel. Qualified personnel must have a minimum three (3) months training and six (6) months experience in sampling or analysis.
  - 6. The owner and operator shall develop and implement a plan take all steps necessary to prevent and/or control spills, nuisance dust, vectors, wind-blown debris, and odors.
  - 7. The owner and operator shall take all practicable steps to prevent the inclusion of hazardous wastes, as defined and regulated by Vermont's Hazardous Waste Management Regulations, into the waste stream being managed by the facility.
  - 8. Clearly visible and easily read signs shall be posted at the facility providing notice of the prohibition on the disposal of banned materials as identified in 10 V.S.A. § 6621a and providing customers with information about available collection programs for such materials.
  - 9. Access to the facility shall be controlled to prevent unauthorized access to the facility, as appropriate, in a manner approved by the Secretary. Access points to the facility shall be secured by locked gates or an equivalent access control during times when the facility operator is not present.

#### **§6-706** Reporting

A. Categorical facilities shall maintain records of waste source, waste type, waste quantity and destination. The data shall be reported to the Secretary within 20 days of the end of each calendar year, <u>in a format</u>

on forms provided by the Secretary.

- B. The <u>owner and/or</u> operator <u>of a certified solid waste management facility</u>, including operators of wastewater treatment plants, shall make reports to the Secretary on forms developed <u>for this purpose</u> by the Secretary. The operator shall file a report with the Secretary either quarterly or as specified in the facility certification. Such reports shall include, but are not limited to, information on:
  - 1. the quantity of wastes, by type, managed by the facility at each site;
  - 2. the sources and quantity of all solid wastes (by municipality) managed by the facility; and
  - 3. the destination of all solid wastes managed by the facility.
- C. The operator shall submit a report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.
- D. Any discharge or emission from a facility which poses a threat to public health and safety, a danger to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Waste Management Division, the local health officer, and the selectpersons of the affected municipalities. Within 7 days of the event, a written report shall be submitted to the parties to whom the event was reported. The report shall identify the discharge or spill that occurred, the type, quantity, and quality of waste discharged or spilled, and the actions taken to correct the problem.
- E. The operator shall make any other reports that may be reasonably required by the Secretary in the facility certification.

## §6-707 Record Keeping

- A. The following records must be kept by the owner and/or the operator of the facility in a dry and secure location at the facility or the primary location of business for the facility:
  - 1. All information that demonstrates compliance with these rules;
  - 2. Copies of the quarterly <u>or annual</u> report forms submitted to the Secretary as a requirement of certification; and
  - 3. Copies of any reports, records, data or other information required to be submitted to the Secretary as a requirement of certification.
- B. All records must be kept from the date on which the application for initial certification is signed through the date of closure of the facility, with the following exceptions:
  - 1. For landfills, record keeping shall persist through the post-closure period and shall cease upon written notification by the Secretary of the completion of post-closure care; and

2. For sludge or septage storage and treatment facilities located at wastewater treatment facilities record keeping shall persist for five (5) years

#### §6-708 Corrective Action

- A. If the operation of a facility, which is otherwise in compliance with its certification, interim certification or categorical certification results in an emission or discharge that poses a threat to public health and safety or the environment, the Secretary may, under the authority of 10 V.S.A. §6610a, require the operator to perform certain activities including, but not limited to:
  - 1. Additional monitoring of the surface water, groundwater, soils or air;
  - 2. Other investigations of the site necessary to determine the nature and extent of the emission or discharge and any contamination resulting from the emission or discharge; or
  - 3. Removal and remedial actions necessary to prevent further contamination, to address the existing contamination and to meet applicable environmental quality and public health standards.
- B. In situations where the Secretary determines that only the cessation of operations can alleviate the hazard posed by a facility, certification suspension or revocation proceedings under §6-607 may be initiated. The Secretary may also pursue such other and/or additional remedies authorized under Vermont law.
- C. <u>In situations where the Secretary determines that corrective action, above and beyond normal facility operation and maintenance, is necessary to prevent significant damage to the public health and safety and to the environment, the following shall occur:</u>
  - 1. The Secretary shall notify the facility Permittee in writing that corrective action is required.
  - 2. Within a timeframe established by the Secretary of not more than one-hundred and-twenty (120) days, all permittees required to perform corrective action shall:
    - i. Submit a corrective action plan; including, but not limited to:
      - a. A description of the actions necessary to prevent present and future damage to public health and safety and the environment;
      - b. An estimate of the quantities of labor, materials and testing necessary to perform the corrective action;
      - c. A timeframe for commencement and conclusion of the action;
      - d. A plan for public notification of the proposed corrective action; and

- e. A plan for periodic reporting to the Secretary on the effectiveness of the ongoing action.
- ii. Submit a cost estimate based on the work required for third party contractor to effect the corrective action plan;
- iii. Provide evidence of financial responsibility for the full cost of the corrective action in accordance with Subchapter 8 and Appendix A. The Permittee must maintain financial responsibility equal to or greater than the required cost estimates at all times and has ninety (90) days to increase the total amount of financial responsibility so as to equal the required cost estimates after any of the following:
  - a. An increase in the required cost estimates;
  - b. A determination by the Secretary that the Permittee no longer meets the gross revenue or financial test; or
  - c. <u>Notification by the Permittee that they intend to substitute alternative financial responsibility for self-insurance.</u>
- 3. The corrective action plan, cost estimate and financial responsibility instruments shall be conditioned in the facility certification or other operating authority. The corrective action plan may be amended, subject to the approval of the Secretary, at any time during the ongoing action to reflect changes in the method or schedule of remediation. Any modification of the plan shall be accompanied by a revised cost estimate and evidence of financial responsibility.
- 4. <u>Upon certification by the Permittee to the Secretary that the requirements of corrective action have been satisfied, the Secretary will notify the certification holder, in writing, within sixty (60) days, that they are no longer required to maintain financial responsibility for corrective action.</u>

## Subchapter 8 – Financial Responsibility, Capability, and Estimates

#### §6-801 Applicability

- A. The requirements for financial responsibility for solid waste management facilities, as contained in this section, shall apply to all existing and future private facilities and municipal solid waste landfills closing after the effective date of these rules.
  - 1. Categorical Minor certification facilities under §6-501(C) are exempt from the provisions of this subchapter unless the Secretary determines financial responsibility is necessary to protect public health, safety or the environment.
  - 2. State and local governments or other public entities are required to comply with the provisions on financial capability in §6-902.
- B. This section establishes requirements and procedures for applicants for solid waste management facility certification to show evidence of financial responsibility for closure and, as appropriate, post-closure care. Financial responsibility is provided so that upon abandonment, cessation or interruption of the operation of a facility, all appropriate measures can be taken, by a third party if necessary, to prevent present and future damage to public health and safety and to the environment.

## §6-802 Responsibility – Private Facilities and Municipal Solid Waste Landfills

- A. Evidence of financial responsibility for private facilities and municipal solid waste landfills closing after the effective date of these rules shall be in one or a combination of the following forms:
  - 1. A trust fund maintained by the applicant for the benefit of the Agency with a surety bond guaranteeing full payment into the fund;
  - 2. A surety bond guaranteeing performance of closure or post-closure care;
  - 3. An irrevocable standby letter of credit;
  - 4. A deposit of acceptable collateral, as determined by the Secretary;
  - 5. A financial test and corporate guarantee, as determined appropriate by the Secretary; or
  - 6. Other financial responsibility instruments that the Secretary may deem appropriate.
- B. The content of any particular financial responsibility instrument must meet the standards and requirements specified in Appendix A.
- C. Financial responsibility instruments shall be submitted on a form prepared for this purpose by the Secretary.

- D. Financial responsibility instruments shall be in the amount of the cost estimate for closure and post-closure care, as calculated using the procedures set forth in §6-804 and §6-805 Subchapter 10.
- E. The certification holder must maintain financial responsibility equal to or greater than the required cost estimates at all times except as provided in this subsection. The certification holder has 90 days to increase the total amount of financial responsibility so as to equal the required cost estimates after any of the following:
  - 1. An increase in the required cost estimates;
  - 2. A decrease in the value of a trust fund;
  - 3. A determination by the Secretary that the certification holder no longer meets the gross revenue or financial test; or
  - 4. Notification by the certification holder that he or she intends to substitute alternative financial responsibility for self-insurance.
- F. An applicant may satisfy the requirements of this section by establishing more than one financial responsibility instrument per facility. These instruments are limited to trust funds, surety bonds, letters of credit, and deposits of acceptable collateral. The instruments must be as specified in Appendix A, except that it is the combination of instruments, rather than the single instrument, that must provide financial responsibility for an amount at least equal to the closure or post-closure care cost estimate.
- G. The Secretary may draw on any or all of the instruments to provide for closure or post-closure care at the facility.
- H. An applicant may satisfy the requirements of this section by using a single financial responsibility instrument for more than one facility.
  - 1. Evidence for financial responsibility submitted to the <u>Secretary Agency</u>, must include a list showing, for each facility, the name, address and amount of funds assured by the instrument. <u>The total</u> must be no less than the sum of funds that would be available if a separate instrument had been established and maintained for each facility.
  - 2. In directing funds available through the instrument for closure or post-closure care for any of the facilities covered by the instrument, the Secretary may direct only the amount of funds designated for that facility, unless the applicant agrees to the use of additional funds available under the instrument.
- I. An applicant may satisfy the requirements of this section for both closure and post-closure care for one or more facilities by using one of the instruments specified in this section. The amount of funds available through the instrument must be no less than the sum of funds that would be available if a separate instrument has been established and maintained for closure and post-closure care.

J. Upon satisfactory demonstration by the certification holder to the Secretary that the requirements of a closure or post-closure care plan have been satisfied, the Secretary will notify the certification holder in writing, within 60 days, that he or she is no longer required to maintain financial responsibility for closure or post-closure care.

#### §6-803 Capability – Public Facilities

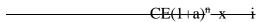
A. The requirements for financial capability for solid waste management facilities apply to facilities operated by the State of Vermont, or by municipal entities created under 24 V.S.A., including facilities operated by Union Municipal Districts formed under 24 V.S.A. Chapter 121, or by other public entities. This includes municipal solid waste landfills which closed prior to the effective date of these rules.

## B. Documentation of Financial Capability

- 1. The auditor of the entity responsible for operating the facility or an independent certified public accountant shall annually submit a report to the Secretary on the financial condition of the entity. For municipal entities, this shall be the auditor's annual report required by 24 V.S.A. §§ 1681 through 1683. For other public entities, the annual report shall contain at least the information required of municipalities in 24 V.S.A. §§ 1681 through 1683, unless otherwise required by the Secretary.
- 2. The following documents must be submitted to the Secretary biennially:
  - i. A letter from the entity's chief financial officer outlining current and anticipated income and expenses for the entity's waste management facilities, and certifying that the entity will be financially capable to meet the cost estimates made for closure and post-closure care required in these rules. The letter must be in a form prescribed by the Secretary and must include, at a minimum, total debt for the facility, closure and post-closure estimates, other anticipated expenses, income from user charges, transferred funds, and other income.
  - ii. The opinion of the entity's auditor or an independent certified public accountant as to the entity's financial capability to meet closure and post-closure costs.
- 3. The documents required by this section must be submitted with the application for certification. Documentation for a Union Municipal District need not include an annual report for each member town, but must include the district's annual report as required by 24 V.S.A. § 4868.

## C. Closure and Post-Closure Fund

- (1) Annual contributions to a fund established to meet closure and post-closure care obligations must be made by the entity responsible for operating the facility. The expense must be included as a line item in the facility's budget.
- (2) The amount of the annual payment to the fund shall be determined by the following equation:



$\frac{(i+1)^n-1}{(i+1)^n}$
Where CE = Closure Cost Estimate Plus Post closure Cost Estimate
a = Forecasted Average Rate of Inflation
i = Anticipated Rate of Interest Income
n = Number of Years to Fund Maturity

The number of years to fund maturity shall be no longer than the life of the facility.

(3) The annual payment to the fund shall be calculated each year using the most recent closure and post-closure cost estimates.

#### §6-804 Closure Cost Estimate

- A. All facilities required under § 6 1002 to prepare a closure plan must have a written estimate of the cost of closing the facility in accordance with the closure plan.
- B. The closure cost estimate shall be based on the work required for a third party contractor to effect proper closure at the point in the life of the facility when closure would be most expensive. Those factors to be considered in estimating the closure cost shall include at least:
  - 1. the size and topography of the facility;
  - 2. the daily and weekly tonnage to be received at the facility;
  - 3. the availability of cover and fill material needed for facility grading;
  - 4. expected amounts of leachate production and requirements for treatment and disposal;
  - 5. plans and methods of disposal at the facility;
  - 6. the location of the facility and the character of the surrounding area;
  - 7. requirements for surface drainage;
  - 8. leachate and gas collection and treatment systems, as required;
  - 9. environmental quality monitoring systems, as required;
  - 10. structures and other improvements to be dismantled and removed;
  - 11. facility storage capacity for the types of wastes being received;
  - 12. off-site disposal requirements;

- 13. an appropriate forecasted average rate of inflation over the active life of the facility; and
- 14. vector control requirements.
- C. The certification holder may revise the closure cost estimate at any time during the active life of the facility if:
  - 1. a certified partial closure has been completed; or
  - 2. a change in the closure plan decreases the closure cost estimate.
- D. The certification holder must revise the closure cost estimate whenever a change in the closure plan increases the closure cost estimate.

## §6-805 Post-Closure Cost Estimate

- A. Facilities that are required under § 6-1003 to prepare a post-closure plan must have a written estimate of the cost of post-closure monitoring and maintenance of the facility in accordance with the post-closure plan.
- B. The post-closure cost estimate shall be based on the work required for a third party contractor to implement the post-closure plan. The factors to be considered in estimating post-closure monitoring and maintenance cost shall include at least:
  - 1. the size and topography of the facility;
  - 2. the type and quantity of waste received;
  - 3. the disposal method and plan;
  - 4. the potential for significant leachate production and the possibility of contaminating groundwater or surface waters;
  - 5. environmental quality monitoring systems;
  - 6. soil conditions;
  - 7. an appropriate forecasted average rate of inflation over the active life of the facility and the post-closure care period;
  - 8. the location of the site and the character of the surrounding area; and
  - 9. leachate and gas collection and treatment systems.

- C. For the purposes of post-closure cost estimates, the post-closure period for landfills shall be 30-years from the date that installation of the capping system is completed or the date of the last most recent estimate submitted. Post-closure care activities will persist until the performance standards for custodial care as outlined in §6-1008 are achieved, which may extend beyond the 30-year planning period.
- D. The financial assurance mechanism provided for the post-closure care must not decrease below the amount of the 30-year cost estimate at any point during the post-closure period.
- E. The certification holder must revise the post-closure cost estimate whenever a change in the post-closure plan increases the cost of post-closure monitoring and maintenance. If post-closure monitoring data or other available information provides an indication that the performance standards for custodial care are unlikely to be achieved during the current approved post-closure monitoring period, the Secretary may request that the landfill owner to submit the following:
  - 1. Report identifying the cause of the post-closure performance deficiencies; and
  - 2. Any adjustment to the post-closure cost estimates needed to reflect any necessary remedial post-closure work
- F. In the event that post-closure monitoring data and any other available information provides sufficient evidence that the required performance standards for custodial care will be achieved, as provided for in §6-1009, the certification holder may submit a request for a modification to the post-closure plan and associated cost estimates shall be adjusted to reflect an appropriate reduction in post-closure care activities.

#### §6-806 Biennial Revision to Closure and Post-Closure Cost Estimate

- A. The certification holder must revise the closure and post-closure care cost estimates at least once every two years. The certification holder must annually adjust and submit the closure cost estimate with consideration for inflation. The adjustment must be submitted on or before the anniversary of the submission of the last adjustment or closure cost revision. The revised cost estimates must be filed on or before the second anniversary of the filing or last revision of the current cost estimates.
- B. The certification holder must review the closure and post-closure care plans prior to filing revised cost estimates in order to determine whether they are consistent with current operations and regulations. The certification holder must either certify that the plans are consistent, or must file an application for certification modification reflecting new plans.
- C. The certification holder must prepare new closure and post-closure care cost estimates reflecting current prices for the items included in the estimates. The certification holder must submit a report to the Secretary showing the necessary calculations and indicating either what the new cost estimates are or that there are no changes.

## §6-807 Assurances for Corrective Measures

A. An owner or operator required to undertake corrective measures must have a detailed written estimate, in current dollars, of the cost of hiring a third party to perform to corrective measures. The cost estimate must account for the total costs of corrective measures as described in the plan for the corrective measures period. This cost estimate must be approved and annually adjusted for inflation and any approved changes to the corrective action plan.

## Subchapter 9 – Storage, Transfer, Recycling and Processing Facilities

# §6-901 Applicability

A. All solid waste recycling, <u>processing</u>, storage and transfer facilities are subject to the requirements of this Subchapter and the requirements of Subchapters 3,5,6, 7 and 8, except for those facilities which manage sludge or septage, facilities used in conjunction with diffuse disposal, and those facilities covered under § 6-1207.

## §6-902 Storage, Transfer, Recycling and Processing Facilities Types

- A. Recycling Facilities: Facilities which only manage solid waste materials that can be diverted from disposal. These facilities must obtain a categorical certification prior to operation.
- B. <u>Transfer Stations: Facilities which manage solid waste for both diversion and disposal; including municipal solid waste.</u> These facilities must obtain a full certification prior to operation.
- C. Construction and Demolition Debris Processing Facilities: Facilities which sort and process solid waste from construction or demolition projects for diversion from disposal and may also manage architectural waste materials. These facilities must obtain a full certification prior to operation.
- D. Organic Recovery Facilities: Facilities which aggregate post-consumer food scraps, food residuals and food processing residuals and process them into a slurried form for delivery to an organics management facility. The facilities must obtain a full certification prior to operation.

## §6-903 Storage, Transfer, Recycling and Processing Facilities Siting

A. There are no additional siting requirements for these facilities beyond the requirements of §6-703.

## §6-904 Storage, Transfer, Recycling and Processing Facilities Design Standards

In addition to the general design requirements of §12-704, the following facility specific design requirements apply:

- A. Facilities shall be designed and operated to prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes or recyclable materials.
- B. Facilities shall be designed to assure the effective collection, storage and/or processing of waste or recyclable materials.
- C. All designs for storage, transfer and recycling facilities shall consider the following aspects of the site, and the applicable requirements of Subchapter 7, in the design of the facility in order to comply with the

General Performance Standards set forth in §6-904 A-B above:

- 1. soils and surficial geology;
- 2. topography; and
- 3. surface water.
- D. Facilities shall be designed to provide for all weather access, with access controlled and limited to hours of operation identified in the facility management plan FMP.
- E. All new facilities designed with tipping floors where municipal solid waste is temporarily deposited pending transport, shall be designed and constructed so that the tipping floor is either enclosed within a building or covered by a roof to prevent exposure of waste to weather. The tipping floor shall incorporate a collection system designed to collect <u>liquids leachate</u> that may be associated with incoming waste materials. <u>Liquid Leachate</u> storage tanks shall be double-walled, and shall be sized appropriately for the particular facility <u>and volume of waste managed</u>.
- F. Leachate collection tanks utilized in collection systems shall be:
  - 1. double-walled with an interstitial space;
  - 2. sized appropriately for the facility;
  - 3. of material compatible with the expected composition of the leachate; and
  - 4. tested biennially for leak detection.
- G. All facilities designed with tipping floors shall have a contingency plan for the facilities operations while the tipping floor is being repaired or replaced. The plan shall consider all aspects of the facility which may be affected by the temporary closure of the tipping floor so that the facility continues to operate within these rules.
- H. Existing facilities which currently have a tipping floor for municipal solid waste shall comply with the requirements of <u>subsection</u> (c) <u>of this section</u> within one year from the effective date of these Rules.
- I. Recycling f Facilities shall be designed to have storage capacity for all recyclable materials and any process residuals.
- J. Facilities that process food residuals prior to introduction into an anaerobic digester shall schedule deliveries such that the food residuals are processed immediately and pumped directly into a holding tank or the digester.

§6-905 Storage, Transfer, Recycling and Processing Facilities Operating Standards

In addition to the general operational standards of §6-705, the following facility specific requirements apply:

## A. General Operations

- 1. A contingency plan must be developed which addresses the proper management of wastes or recyclable materials during both planned and unplanned events when the facility is and is not in operation. The contingency plan must be submitted with the application for certification.
- 2. An operator training plan must be developed which provides for all facility personnel involved in the handling of waste to receive organized instruction that teaches them to perform their duties in a way that ensures the facility's compliance with all applicable statutes, rules and conditions of certification. The operator training plan must be submitted with the application for certification.
- 3. A qualified operator shall be on site during all hours of operation, unless specifically waived by the Secretary in writing., If this requirement is waived, in which case a contact person must nevertheless be able to be contacted at all times.
- 4. Personal protection materials and equipment appropriate to the materials being handled shall be available at all times for material handling and spill control.
- 5. The operator shall take all practicable steps to prevent the inclusion into the waste stream destined for disposal at a discrete disposal facility of hazardous wastes, subject to regulation under the Vermont Hazardous Waste Management Regulations, and all landfill banned wastes, identified in 10 V.S.A. § 6621a, from being included in the waste stream destined for disposal.
- 6. All collected wastewater leachate from transfer stations with tipping floors shall be disposed of in a wastewater treatment facility.
- 7. Hours of operation shall be <u>as</u> specified in the <u>submitted and approved</u> <del>facility management plan</del> FMP and facility certification.
- 8. All solid waste received by a facility shall be actively managed. All solid waste leaving a facility shall be transferred to an appropriate managing facility that is permitted for solid waste management, if required by these rules. Waste shall not be stored for a period of time which results in a condition adversely impacting the environment or public health and safety.

#### B. Standards for Solid Waste

- 1. Except as specifically provided in this section, all solid waste shall be stored in containers. The facility shall be managed to minimize the possibility of an emission or discharge of contaminants from the containers.
- 2. All solid waste shall be transported to a treatment or disposal facility on a schedule adjusted as necessary to minimize odors from the waste.

3. Solid waste deposited on a tipping floor shall be removed from the tipping floor as soon as is practical, but in no event later than the end of the operating day as defined in the <u>FMP facility management plan</u>. The <u>facility management plan FMP and contingency plan shall identify any unique circumstances when solid waste might remain on the tipping floor beyond the end of the operating day and the practices that will be implemented at the facility so that the facility complies with the provisions of §6-904 A-B during this unique circumstance.</u>

## C. Standards for Recyclable Materials

- 1. Materials to be recycled, contaminated recyclable materials, and process residuals which may be dispersed by wind shall be stored inside buildings or other roofed structures, in box trailers, or in other closed containers which are covered except when the facility is operating.
- 2. <u>In accordance with §10 V.S.A 6605(J)(1)</u>, the Permittee(s) shall offer parallel collection for mandated recyclables.
- 3. The Permittee shall not dispose of recyclable materials previously source separated by the hauler or the commercial or residential customer.

#### D. Standards for Lead-Acid Batteries

- 1. All lead-acid batteries shall be stored under cover on an impervious surface.
- 2. The facility must maintain a supply of absorbent materials and acid neutralizers sufficient to clean up a spill of up to one gallon of battery acid solution.
- 3. All batteries shall be transported off-site in accordance with all applicable federal and state hazardous materials transport regulations.

# E. <u>Standards for HHW/CEG Hazardous Waste at Semi-Permanent Collection Units and Permanent Collection Facilities</u>

- i. These facilities or units must meet the requirements of §6-1206(d)(1) and the following requirements:
- ii. All wastes must be handled by personnel appropriately trained in accordance with all applicable federal and state statutes and regulations;
- iii. all wastes collected must be properly stored at the end of each operating day in accordance with the <u>FMP</u> facility management plan; and
- iv. facilities must comply with the generator short-term storage requirements of the Vermont Hazardous Waste Management Regulations.

## F. Standards for Tires

1. No more than 3,000 tires may be stored uncovered at the facility site at any time. Tires must be removed from the facility on at least an annual basis, unless the facility processes tires on-site, in which case, the maximum amount and the storage design shall be dictated by the FMP facility management plan.

## G. Standards for Construction and Demolition Waste (C&D)

- 1. The maximum storage time and the maximum on-site volume for C&D collected at a facility that processes the material on-site shall be dictated by the approved FMP facility management plan.
- 2. C&D collected at a facility that does not treat the material on-site must be stored in containers or in an enclosed or covered area.

#### H. Standards for Architectural Waste

- 1. <u>Architectural waste recycling facilities shall be designed and operated to achieve, to the extent feasible, the greatest amount and highest quality of marketable materials.</u>
- 2. Other than natural wood used as a feedstock for a facility that burns biomass-only for the purpose of generating heat or electricity, the combustion of architectural waste shall not be considered compliant with 10 V.S.A. §6605(m).

## I. Standards for Leaf and Yard Waste

1. <u>In accordance with §10 V.S.A §6605(j)(2)</u>, facilities shall offer parallel collection for leaf and yard waste. These materials may be stored on the ground and are exempt from the containerization requirement of §6-905(B)(1).

#### J. Food Residuals

- 1. <u>In accordance with §10 V.S.A 6605(j)(3)</u>, the Permittee(s) shall offer parallel collection for organics (food residuals) at the facility by July 1, 2017.
- 2. All food residuals and organics shall be transported to a certified or registered treatment facility on a schedule adjusted to control odors and vectors from the waste.
- 3. The Permittee(s) shall store all food residuals in watertight, lidded containers. An adequate supply of wood shavings or saw-dust shall be on hand to cover the food residuals to control vectors and odors.

#### K. Other Materials

1. Untreated wood, concrete, bricks, mortar or asphalt, scrap metals, appliances and furniture are exempt from containerization requirement of §6-905(B)(1) and may be stored uncovered at the facility. All These materials listed in subsection (g)(1) of this section must be removed from the ground, and either taken off-site or stored under cover in accordance with a schedule that is

included in the approved <u>FMP</u> facility management plan. but i In no event shall this schedule be more than two years from the date of receipt. The maximum on-site volume shall not exceed 2,000 cubic yards at any time unless otherwise approved as part of the <u>FMP</u> facility management plan.

2. Refrigerants from appliances shall be drained and collected by a qualified person prior to any further treatment of the appliances. Refrigerant-containing appliances shall be stored and handled in a manner that prevents the release of refrigerant.

## §6-906 Storage, Transfer, Recycling and Processing Facilities Applications

In addition to the general application requirements of Subchapter 5, the following facility specific requirements apply:

- A. Recycling facilities which anticipate collecting and managing between 50 and 400 tons of recyclable materials per year may qualify for categorical certification provided that an applicant submits an application which contains the information in subsection (b) of this section. If the facility qualifies, a categorical certification will be issued for a period up to five years.
- B. No later than January 1, 2002, any person operating a facility which was granted categorical certification prior to the effective date of these rules shall reapply for and receive either categorical certification or certification under Section 6-304 of these rules or shall cease operation of the facility.
- C. Facility Management Plan: Design and operation of storage, transfer and recycling facilities shall be addressed in a facility management plan, which shall describe how the facility will meet the requirements of §§ 6-1203, 6-1204, 6-1205 and all applicable requirements of § 6-1206. The management plan shall be prepared under the direction of a professional engineer, licensed to practice in the State of Vermont, unless the requirement that an engineer be involved is specifically waived by the Secretary. The management plan shall be submitted with the application for certification.
- D. An owner/operator seeking certification as an Architectural Waste Recycling Facility in accordance with 10 V.S.A. 6605(m) shall specify in the FMP how each of the architectural wastes are collected, stored, separated, and processed for market.
- E. ORFs which process food residuals shall address the proper reuse or disposal of the liquid and solid waste residual streams within their FMP.
- F. ORFs which process food residuals for use as a feedstock for an anaerobic digester or compost facility shall have agreements in place with those facilities and shall demonstrate in the FMP that these agreements are sufficient to properly manage the expected capacity of the facility.

# §6-907 Storage, Transfer, Recycling and Processing Facilities Closure

A. All facilities subject to closure must be closed in a manner that:

- 1. Minimizes the need for further maintenance related to the waste facility; and
- 2. Controls, minimizes, or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater, or surface waters or the atmosphere. Such actions shall be completed to the extent necessary to prevent threats to public health and safety and the environment.
- B. The approved closure plan will become a condition of any certification or other operating authority issued by the Secretary.
- C. An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- D. An amended closure plan must be submitted for approval to the Secretary whenever:
  - 1. Changes in the operating plan or facility design affect the closure plan.; or
  - 2. There is a change in the expected year of closure.
- E. When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment must be requested at the same time. If a certification modification is not needed to authorize the change in operating plans or facility design, the request for a closure plan amendment must be made within 60 days after the change in plans or design occurs.
- F. Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.
- G. Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.
- H. Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:
  - 1. Certification by the <u>certification holder owner or operator</u> of the facility and <u>by</u> a professional engineer licensed in the State of Vermont, that the facility has been closed in accordance with the specifications of the approved closure plan; and
  - 2. verification that the owner of the property on which the facility is located has recorded a notation on the deed to the facility property, or on some other instrument that is normally examined during title search, that will, in perpetuity, notify any potential purchaser of the property that the land has been used as a solid waste management facility.

## **Subchapter 10 – Discrete Disposal Facilities**

### §6-1001 Applicability

- A. The deliberate placement of solid waste into or on any land for disposal shall be subject to the certification requirements of these rules.
- B. Mining or mineral processing waste subject to the hazardous waste management regulations shall not be subject to this subchapter. Any mining or mineral processing waste excluded from the Hazardous Waste Management Rules pursuant to §7-203(e) shall be subject to the certification requirements of these solid waste management rules.
- C. Soil, rock and materials from mining activities that are not mining waste or a mineral processing waste are not subject to the certification requirements of this rule.

### §6-1002 Disposal Facility Types

- A. Categorical Disposal Facilities: A person that disposes of one or more of the following categories of solid wastes is eligible for categorical <u>disposal</u> certification:
  - 1. Stumps, root masses, decomposing wood or brush or untreated wood;
  - 2. Bituminous concrete:
  - Rinsed non-recycled glass;
  - 4. Concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;
  - 5. Street sweepings;
  - 6. Car wash grit and municipal separated <u>sewer stormwater</u> catch basin grit; provided that the applicant demonstrates that the solid waste does not leach volatile organic compounds which exceed groundwater enforcement standards;
  - 7. Mining waste not in excess of 15,000 cubic yards per year; and
  - 8. Development soils
- B. <u>Landfill Facilities</u>: Full certification is necessary for the construction, operation, expansion and closure of all landfills, including but not limited to, municipal solid waste landfills, mono-fill landfills, construction and demolition debris landfills, mining waste landfills and mineral processing waste landfills.
- C. <u>Post-Closure</u>, <u>Custodial Care and Corrective Action at Landfills</u>: <u>In lieu of certification</u>, the obligations of these actions are regulated by these rules.

### §6-1003 Disposal Facility Siting

<u>In addition to the general siting requirements of Subchapter 7, the additional following requirements apply to disposal facilities:</u>

### A. Categorical Disposal Facility applicants must also demonstrate that:

1. Disposal shall not occur within 300 feet of a public highway, or the property line(s) of lands owned by others unless the applicant can demonstrate that a reduced distance will not result in objectionable odors off site of the facility, unreasonable visual impact off site of the facility, unreasonable increase in level of noise detected off site of the facility, creates a nuisance and shall not create a condition that otherwise adversely affects public health and safety and the environment. In no instance shall the distance be less than 50 feet.

### 2. Disposal shall not occur within:

- i. the source isolation zone of a public water supply, or within 200 feet of the source of a public drinking water supply, whichever is greater.
- ii. within 200 feet of the source of a private drinking water supply.
- iii. If disposal is proposed within the source protection area of a public water supply, the location of the disposal area and the delineated source protection area shall be identified on a site map; and
- iv. Disposal shall not occur within 100 feet of Class B Waters, as designated by the Water Resources Board or the Natural Resources Board.:
- v. A wetland or its associated buffer.
- 3. Animal and wildlife carcass disposal shall not occur within three (3) feet of seasonal high groundwater or within six feet of bedrock

### B. Discrete Disposal Landfills Facilities are:

- 1. prohibited from being sited in the Green Mountain National Forest, except for a one half-mile corridor drawn from the center line of the right of way of each Federal and secondary highway or as approved by the National United States Forest Service;
- 2. prohibited from being sited within the floodway, <u>mapped fluvial erosion hazard zones</u> or within the 100-year flood plain;

- 3. prohibited from location within the Source Protection Area of a public water system using a groundwater source; and
- 4. prohibited from location within zone 1 or zone 2 of a Source Protection Area for a public water system using a surface water source.
- 5. Facilities shall be sited such that monitoring of any emissions or discharges from the facility can occur prior to off-site impacts. There shall also be sufficient distance as to implement remediation for these impacts, if necessary.

# §6-1004 Disposal Facility Design Standards

In addition to the general design requirements of Subchapter 7, the additional following requirements apply to all disposal facilities (categorical disposal facilities and landfills):

- A. Facilities shall be designed to minimize the possibility of an emission or discharge of contaminants from the facility. and, should an emission or discharge occur, the threats from the emission or discharge to public health and the environment.
- B. Facilities shall be designed to identify a means to control odor, vectors, and dust so as to preclude hazards to public health and safety or the creation of nuisance conditions.
- C. Facilities shall be designed to protect surface water, groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to surface water, groundwater, or the air.
- D. Facility management plans shall include provisions for contingencies for the proper management of wastes during both planned and unplanned events when the facility is not in operation.
- E. Facility management plans FMPs shall include operator training and safety plans that assure that all facility personnel involved in the handling of waste receive organized instruction that teaches them to perform their duties in a way that ensures the facility's compliance with these rules and conditions of certification.
- F. Final cover systems for discrete disposal facilities shall be designed, constructed and maintained to minimize erosion and infiltration from precipitation.
- G. Discrete disposal facilities Landfill design considerations:
  - 1. <u>Landfills</u> in operation prior to July 1, 1987, that are certified to receive or actually receives less 1,000-tons of municipal waste per year may be exempted from liner and leachate requirements if the Secretary finds that they will not create a significant risk to public health and that they will not cause irreparable harm to the environment. This exemption only applies to <u>discrete disposal facility landfill</u> operations within the waste management boundary of the facility as <u>it that boundary</u> existed on November 3, 1995.

- 2. New discrete disposal facilities landfills or new operational units at an existing facility, placed in operation after July 1, 1987, shall have liner and leachate collection systems and appropriate provisions for leachate treatment, except as otherwise provided in § 6-309(b) or in § 6-1004(G)(1) of these rules. The Secretary may further waive the liner requirement for discrete disposal facilities landfills or portions of discrete disposal facilities landfills that are designated solely to receive particular waste components that are not the a potential source of leachate harmful to public health and safety or the environment or the creation of nuisance conditions.
- 3. Expansions of an existing facility that has documented groundwater contamination may be approved on a case-by-case basis. The design of the proposed expansion must demonstrate that construction will be in compliance with these rules and with the Groundwater Protection Rule and Strategy. Consideration of additional monitoring requirements, needed to demonstrate the integrity of the expansion area independently of the existing areas (e.g. monitoring beneath the liner of the expansion area) shall be included in the design. Remedial actions of the existing contamination shall also be included in the design and shall demonstrate improvement in groundwater quality.
- 4. Placement of a liner system over buried solid waste may will be approved by the Secretary on a case by case basis where the following are adequately addressed in addition to all other requirements for lined discrete disposal facilities:
  - i. stability;
  - ii. settlement;
  - iii. drainage of leachate to leachate collection systems;
  - iv. ability to monitor the proposed landfill unit as required in § 6-604(a)(4) and § 6-1004(C); and
  - v. compliance with the Groundwater Protection Rule and Strategy, as amended \$6 303(d) for both the proposed and existing landfill units.
- 5. <u>Landfill subgrade shall be of low-permeability materials and adequate for supporting the loads</u> and stresses imposed by the weight of the landfill and all facility components during all phases of construction, operation, closure and post-closure.
- 6. All liner systems shall be of double liner construction. All liner systems must be approved by the Secretary on a case-by-case basis:
  - i. The primary liner shall be a synthetic material, or a composite of synthetic and natural material, with the synthetic layer consisting of a minimum of a 60-mil High-density Polyethylene (HDPE) Flexible Membrane Liner (FML). The liner must be chemically compatible with anticipated waste and leachate characteristics

- ii. The secondary liner shall consist of a synthetic material, or a composite of synthetic and natural materials, and a minimum a 60-mil HDPE FML.
- iii. All natural components of liners, must consist of an appropriate thickness of soils at least a 2-foot layer of compacted soils or materials having an in-place permeability of 1 x 10<sup>-7</sup> cm/sec or less.
- iv. The liner system shall not be penetrated by any appurtenances.
- 7. The liner system shall be covered in the base area with an overlying protective granular soil layer sufficient to protect the liner from puncture, assist in leachate migration and limit hydraulic head development on the liner. Geosynthetics may be used in areas of extended side slopes, where placement of granular materials is not possible, to provide this same functionality.
- 8. All such facilities Landfills shall be equipped with leak detection and leachate collection systems capable of detecting and collecting leaks from the primary liner system. Such a collection system shall be designed to be hydraulically separate from the stormwater management system and:
  - i. Designed to function effectively during the active, closure and post-closure care phases with sufficient life expectancy and generation rate and volume accommodations; and
  - ii. Designed to operate effectively under freezing and frozen ground conditions.
- 9. Leachate collection systems shall be placed and sized designed to minimize ponding on the liner. The components of leachate collection systems that feed to leachate storage facilities shall be designed to insure that the depth of leachate does not exceed 12 inches 30 cm over the liner except in sump areas. Leachate can be stored on the primary liner in excess of 12 inches 30 cm for up to five days following a 25 year/24- hour or greater storm event.
- 10. <u>Leachate and gas condensate storage facilities shall provide capacity for storing a volume of leachate equivalent to 20% of the 100-year storm storage volume. All components of these collection and removal systems located outside of the landfill liner system shall be designed to have double containment and constructed with effective leak detection.</u>
- 11. Discrete disposal facility Landfill designs shall provide a sequential capping plan for closing operational units of the disposal facility during its life. Such operational units shall be designed for a life not to exceed five ten (10) years unless otherwise approved by the Secretary.
- 12. <u>Facility design facilities</u> shall assure the control and treatment, <u>if as</u> determined necessary by the Secretary, of gases resulting from the decomposition of wastes to prevent hazards to public health and safety, the environment, or the creation of a nuisance.
- 13. Discrete disposal facility Landfill designs shall provide for the appropriate control of surface water run-on and run-off, as determined by the Secretary. At a minimum designs shall include a

- management system to divert run-on, control run-off discharge, control erosion, sedimentation, siltation and flooding and minimize the generation of leachate.
- 14. The engineering design and plan for lift development shall ensure proper drainage on the discrete disposal facility landfill site and prevent ponding of water on the facility surface. This requirement applies both during the working life of the facility and after the final cover system has been installed and vegetation established.
- 15. <u>Landfill design and fill plans must be such that final grades are achieved as soon as possible and that the open area for active filling be minimized.</u> Designs shall include extent and duration of planned intermediate cover and interim cap that will be utilized prior to final capping of the landfill units.
- 16. The final <u>capping cover</u> system design for lined <u>discrete disposal facilities landfills</u> shall include:
  - i. a <u>vegetative/erosion control</u> layer consisting of a minimum of 6-inch thick earthen material layer capable of sustaining native plant growth;
  - ii. <u>a protection layer consisting of a minimum of 24-inches of earthen material that promotes drainage, is capable of resisting erosion and minimizes long term maintenance;</u>
  - iii. a geocomposite drainage layer;
  - iv. an LLDPE flexible membrane liner with a minimum thickness of 40-mil; and
  - v. a <u>infiltration hydraulic barrier</u> layer consisting of a minimum 18-inches thick layer of earthen material with a permeability <u>less than or equal to the permeability of any bottom liner system or natural subsoils present or a permeability less than 1 x 10<sup>-5</sup> cm/sec, whichever is less. This layer shall be free of contaminants where the hydraulic barrier layer comes in contact with the flexible membrane liner.</u>
  - vi. a gas collection layer.
  - vii. The Secretary may approve an alternative final cover design and <u>/or</u> materials that includes an infiltration layer and/or an erosion layer of different specifications or materials which are when they can be demonstrated to achieve a minimum of equivalent performance.
- 17. The final cover capping system design for unlined discrete disposal facilities landfills shall include a minimum two-foot thick layer of earthen material with a permeability of less than 1 x 10<sup>-5</sup> cm/sec and less than the permeability of the facility base soils, and a minimum six-inch thick earthen material layer capable of sustaining native plant growth. Alternatively, a final capping cover system, as described in §6-1004(G)(15) above, of this section for lined discrete disposal landfill facilities will be utilized for unlined discrete disposal landfill facilities, if

- required by the Secretary. The Secretary may approve alternative materials to the earthen material which are demonstrated to achieve equivalent performance.
- 18. The final <u>capping eover</u> system design for either lined or unlined <u>discrete disposal landfill</u> facilities shall provide for a minimum slope of five (5) percent <u>after settlement</u> and a maximum slope of 33 1/3 percent <u>at closure</u>.
- 19. All new municipal solid waste discrete disposal landfill facilities and lateral expansions located in seismic impact zones must have containment structures, including liners, leachate collection systems, and surface water control systems and capping system designed to resist the maximum horizontal acceleration in lithified earth material for the site.
- 20. Notwithstanding any other provisions of these rules, facilities used for the disposal of ash from waste incinerators must have liner and leachate collection systems and appropriate provisions for leachate treatment. Waste incinerator ash shall not be disposed with other waste within the lined cell.
- 21. <u>Landfill facilities shall be designed with an adequate landfill gas monitoring system to ensure that landfill gas concentrations do not exceed the LEL for methane at the facility property boundary or 25% of the LEL for methane within buildings.</u>
- 22. A groundwater monitoring system must be designed and installed with a sufficient distribution and number of monitoring wells at depths capable of yielding groundwater samples from aquifers potentially impacted by the landfill. Up-gradient and/or other monitoring wells must also be established, as needed, for the determination of local background groundwater quality.

# §6-1005 Disposal Facility Operating Standards

In addition to the general operational requirements of Subchapter 7, the following apply for disposal facilities:

- A. Categorical disposal certifications shall contain, at a minimum, the following operating and reporting conditions:
  - 1. For developmental soil categorical disposal facilities, waste shall be covered and graded to promote runoff at least once a year.
    - i. A minimum cover shall consist of at least a two-foot thickness of a silty fine sand or other material capable of sustaining vegetation. The Secretary reserves the right to require more frequent cover requirements.
    - ii. At closure, a minimum slope of five (5) percent and a maximum slope of 33 ½ percent shall be achieved.
    - iii. <u>Upon closing, the owner shall make a notice to the lands records indicating that the parcel was a disposal site for development soils.</u>

- 2. <u>At all other categorical disposal facilities</u>, the solid waste shall be covered and the disposal area shall be graded to promote runoff when closing the facility.
  - i. A minimum cover shall consist of at least one\_foot thickness of a silty fine sand or other earthen or other material capable of sustaining native vegetation. The Secretary reserves the authority to require more frequent cover requirements.
- 3. Access to the disposal facility shall be controlled at all times by a fence or barrier and or a lockable gate. An attendant shall be present <u>during hours of operation</u> to assure that only the waste allowed by the categorical disposal certification is disposed of at the facility, to perform record keeping and to observe disposal <del>during the hours of operation</del>;
- 4. The <u>Applicable</u> siting limitations, set forth in subsection (d)(6) of this section are <u>to be</u> maintained throughout the period of disposal and closure.
- 5. The facility operator shall make reports to the Secretary on forms developed by the Secretary. The facility operator These reports shall be filed file a report with the Secretary on a quarterly basis or as specified in the facility certification.; and
- 6. <u>Development soil categorical disposal facilities shall, on a quarterly basis or as specified in the facility certification, also provide copies of the originating site work that is required by this Rule prior to disposal at the site.</u>
- 7. Operators or owners shall report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.
- 8. The Secretary may require any additional operational requirements in the certification, including financial responsibility or capability requirements set forth in Subchapter 8 of these rules, if it is determined necessary to protect public health, safety, or the environment.
- B. The minimum additional operational requirements for a landfill facility are as follows:
  - 1. Before the facility may commence operations within a newly constructed cell, a professional engineer, licensed in the State of Vermont, must certify that the cell was built in accordance with the requirements of the certification, approved plans, approved change orders, and furnish a complete set of as-built drawings to the Secretary.
  - 2. A qualified operator familiar with procedures and the <u>approved FMP</u> facility management, <u>facility certification</u>, and the requirements of these Rules shall be on site during all hours of landfilling operations.
  - 3. Properly maintained and calibrated scales should shall be used to measure the weight of solid waste received and disposed at the facility.

- 4. Adequate horizontal and vertical benchmarks shall be established prior to depositing any waste, and maintained throughout the life of the facility.
- 5. Non-implemented waste shall not be accepted for disposal. Approved uniform solid waste and approved processed construction and demolition waste may be accepted, but only in accordance with the standards set forth in the Secretary's written approval of such waste. Disposal of regulated hazardous waste is prohibited.
- 6. The first lift of waste above the liner and leachate collection system shall be of select waste and placed in a manner that prevents damage to the liner system.
- 7. The owner and/or operator shall make provisions for standby equipment to be operational within 24 hours of breakdown of the primary equipment.
- 8. Lift development shall be carried out in accordance with the engineering plans, to ensure proper drainage and to prevent ponding.
- 9. Cover materials, earthen or other approved alternative cover materials, when stored on-site must be managed to prevent the production of fugitive dust or the creation of nuisance or other impairment to public health, safety or the environment.
- 10. <u>Construction and demolition landfills are exempt from this daily cover requirement.</u> With the exception of construction and demolition waste landfills, <u>Daily</u> cover material shall be in place at the end of each operating day, or at more frequent intervals <u>if necessary</u>, <u>as needed</u> to control disease vectors, fires and odors, to prevent blowing litter, and to discourage scavenging by animals, without presenting a threat to human health and the environment. At a minimum landfills must provide:
  - i. Grading of cover materials shall be sufficient as accomplished to prevent ponding.
  - ii. At least a six (6) inch thickness is required when earthen material is used as <u>daily</u> cover material.
  - iii. In all areas other than the working face which have not received waste material in any given operating day, the owner or operator shall take all steps necessary to ensure that the cover material remains functional and stable until such time as <u>intermediate cover</u>, <u>interim cap or</u> the final <u>capping cover</u> system is installed.
  - iv. Construction and demolition waste landfills shall maintain cover pursuant to the cover requirements contained within facility's approved facility management plan.
- 11. <u>Intermediate cover shall be placed as soon as possible on any area that is not anticipated to receive waste for a period of 3 months or more.</u>

- i. <u>Intermediate cover shall consist of a minimum 1-foot thickness of compacted earthen</u> material, which may include the 6-inch daily cover, and shall be stabilized by vegetated cover;
- ii. <u>Intermediate cover shall be replaced by an interim or final capping system if additional waste is not placed in the area within one year of intermediate cover installation;</u>
- iii. Extensions beyond the one-year deadline may be granted by the Secretary on a case-by-case basis.
- 12. <u>Interim capping shall be carried out in accordance with engineering plans.</u> To minimize infiltration and enhance gas collection, the operator may place interim cap in areas that are not anticipated to receive waste for a significant period of time. Interim caps shall:
  - i. consist of a flexible membrane liner or a design equivalent to the requirements for the final capping system of an unlined landfill as provided for in §6-1004(G)(17);
  - ii. <u>be maintained and inspected to ensure performance and functionality, provide proper drainage, enable gas collection, prevent ponding; and</u>
  - iii. <u>be replaced by the final capping system when it is determined that additional waste will not be placed in the area.</u>
- 13. Within 30 days, the operator shall notify the Agency in writing when the facility has reached final grades, or capacity limits, or ceases accepting waste. The final cover capping system shall be in place within 90 days of attaining final grades, final capacity, or of the last date of receipt of waste for disposal. Grass or ground cover shall be established within four (4) months of final cover cap installation. The Secretary may approve an extension to these deadlines if warranted by weather conditions cause an extension to be necessary.
- 14. Industrial and commercial solid waste, sludge, septage or other materials which may combine to form hazardous substances shall be deposited only as specified in the certification.
- 15. <u>Groundwater monitoring must occur as specified in the issued certification. The point of compliance shall be no more than 150 meters from the waste management unit boundary and be located on property owned by the landfill owners.</u>
- C. Biosolid Acceptance at a Municipal Solid Waste Landfill
  - 1. Prior to the disposal of biosolids, written approval from the Secretary is required.
  - 2. Biosolids must be 18 percent solids content or higher to be accepted at the facility.
  - 3. Biosolids that cannot pass the following tests are prohibited from disposal:

- i. Paint filter test: Materials must not contain free liquids; and
- ii. <u>Toxicity Characterization Leaching Procedure (TCLP): Hazardous materials are prohibited from disposal.</u>
- 4. <u>Biosolids shall be mixed at the working face to minimize odors, vectors, and bacteria and managed according to the approved FMP.</u>

## D. Asbestos Disposal at Landfills

- 1. Any amount of <u>friable</u> asbestos waste exceeding ten cubic yards from a single source must be disposed of in a disposal facility certified to receive asbestos waste only, unless otherwise approved by the Secretary.
- 2. Facilities accepting asbestos shall: The operator of such a facility shall:
  - i. Disposes of waste in an area of the certified facility away from the working face, but not along a final slope; and
  - ii. Take appropriate measures to ensure the protection so all persons present during the disposal of any asbestos waste and who perform duties within the disposal facility;
  - iii. Maintain records on the generator, source and type of asbestos waste, volume disposed and dates of disposal;
  - iv. Mist the asbestos waste and the active area of disposal daily disposal cell prior to disposal;
  - v. <u>Inspect vehicle contents to determine whether all Only accept</u> asbestos waste <u>that</u> has been <u>determined to be</u> properly contained and labeled in accordance with Department of Health Regulations for Asbestos Control;
  - vi. Verify the content of contained asbestos waste from each generator;
  - vii. Mist the contained asbestos waste as it is removed from the vehicle;
  - viii. Perform disposal in such a way as to ensure no airborne emissions;
  - ix. Cover immediately after placement with at least six inches of appropriate cover material, ensuring no breakage of contained asbestos waste;
  - x. Provide training of employees in the asbestos waste disposal procedures; and
  - xi. Ensure that the properly contained asbestos waste is transported in closed transport vehicle containers and that the containers have not been mechanically compacted prior to receipt

### at the disposal facility; and

- xii. Use a three-dimensional grid system to identify where the waste is disposed.
- 3. Amounts of <u>non-friable</u> asbestos waste less than ten (10) cubic yards from a single source may be disposed of at a certified municipal solid waste <u>landfill</u> discrete disposal facility if the operator:
  - i. Meets the requirements of § 6-802(a)(1)(A), (B), (D), (E), (G), (H), and (J).

# E. <u>Liquid Waste Disposal at Landfills</u>

- 1. Containers holding liquid waste may not be placed in a landfill unless:
  - i. The container is a small container similar in size to that normally found in household waste;
  - ii. The container is designed to hold liquids for use other than storage; or
  - iii. The waste is household waste.
- 2. <u>Bulk or non-containerized liquid waste may not be placed in a landfill unless the liquid waste is a household waste other than septage.</u>
- 3. <u>Absorbent material may be added, or dewatering of waste may be done, prior to placement in a landfill so that waste is not considered a liquid waste.</u>
- 4. Liquid containers with a capacity of greater than 30 gallons shall be cleaned prior to disposal.

### F. Regulated Medical Waste

- 1. <u>Landfills shall only dispose of regulated medical waste that has documentation of having been</u> treated and shall:
  - i. dispose of the waste in an isolated area within the working face except if incinerated and as provided in § 6-1004(G)(20);
  - ii. Take appropriate measures to ensure the protection of all persons present during the disposal of any treated RMW and who perform duties within the disposal facility; and
  - iii. Cover the area immediately after placement with at least six-inches of appropriate cover material, ensuring no breakage of contained RMW while exposed to an open air environment.

- G. Performance Criteria for Alternative Daily Cover Material
  - 1. <u>Alternative materials of alternative thickness may be approved by the Secretary on a case-by-case basis for landfill daily cover material.</u>
  - 2. When requesting approval of a material or product for use as an alternative daily cover (ADC) material, the owner or operator must demonstrate that the performance of the proposed ADC will: control disease vectors, control fires, reduce odors, prevent blowing litter, discourage scavenging, assure aesthetic appearance and control moisture and erosion.
  - 3. Written approval of the material must be received from the Agency prior to use. The request for approval should, at a minimum, address the following:
    - i. The material type and name;
    - ii. A material safety data sheet (MSDS) for the material, if available;
    - iii. A detailed operations plan which demonstrates that the performance of the material will meet the performance criteria for alternative daily cover;
    - iv. Specifications of the material, procedures for placement, thickness and weather conditions during which the material can or cannot be used;
    - v. A contingency plan for the use of earthen daily cover in the event that the ADC material cannot be used, is not available or is not performing adequately; and
    - vi. Any available documentation of the material's use at other landfills which addresses the materials performance and regulatory status.
  - 4. A field demonstration may be requested by the Secretary prior to approval.
- H. Response to Detection of Liner Leakage: If flow within the secondary leachate collection system exceeds a monthly average of 20 gallons-per-acre-per-day, the landfill shall:
  - 1. Notify the department in writing within 24 hours of determining the existence of an exceedance;
  - 2. Take any short-term actions to reduce or eliminate the leaks;
  - 3. Sample and analyze the primary and secondary leachate for the following, with results submitted to the Secretary within 5 days:
    - i. field temperature, pH and specific conductance'
    - ii. chemical oxygen demand;

- iii. biological oxygen demand;
- iv. total sodium and total chloride;
- v. total arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc;
- vi. Volatile Organic Compounds utilizing EPA Method 8260; and
- vii. Semi-Volatile Organic Compounds utilizing EPA Method 8270;
- 4. Investigate and determine the location, size and cause of the leak(s);
- 5. Submit a preliminary assessment regarding the cause of the exceedance to the Secretary within 14 days, including a management plan for elimination of the leak; and
- 6. <u>Implement the management plan and/or any other requirements determined by the Secretary to be necessary for the protection of public health and safety and the environment.</u>

## I. <u>Landfill Gas Management</u>

- 1. The landfill gas management system must effectively control landfill decomposition gas emissions and any related odors.
- 2. Surface Emissions Monitoring (SEM) shall be performed for the detection of fugitive emissions, off-site migration of landfill gases and concentrations of landfill gases within structures on the landfill property. Monitoring shall occur as provided for in the facility certification and under an approved SEM plan.
- 3. <u>If methane levels exceed 25% of the lower explosive limit (LEL) within structures or if the LEL is exceeded on the facility or at the property boundary, the owner and/or operator shall:</u>
  - i. <u>Immediately take all steps necessary to ensure protection of human health and safety;</u>
  - ii. Within 24 hours of detection notify the Secretary and any affected property owners;
  - iii. Within 30 days of detection submit a remedial action plan for the gas releases to the Secretary for approval; and
  - iv. <u>Implement the approved plan in accordance with a compliance schedule established within the approved plan.</u>
- J. At a minimum a mining waste or mineral processing waste landfill certification holder shall:
  - 1. Notify the Secretary prior to the implementation of any change to the mining or manufacturing process, or any change to the management of the mining waste, that would chemically or

- physically alter the character of the mining waste.
- 2. Report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.
- 3. Notify the Secretary, the local health officer, and the municipal legislative body of the affected municipalities about any unpermitted discharge or emission from a facility within 24 hours. Within seven days of the event, a written report shall be submitted to the Secretary, the local health officer and the selectpersons of the affected municipalities. The report shall identify the discharge or spill that occurred, the type, quantity and quality of the waste discharge or spilled and the actions taken to correct the problem. This condition applies in addition to the requirement of 10 V.S.A. §6617.
- 4. Adhere to any additional certification conditions, requirements, restrictions, as the Secretary may deem necessary to preserve and protect the public health and the air, groundwater and surface water quality. This may include requirements concerning the recording, reporting and inspections of the operation of the facility.

## §6-1006 Disposal Facility Applications

- A. Except for development soil categorical disposal facilities, categorical disposal facilities must submit the minimum application requirements established in §6-504.
  - 1. <u>Development soil categorical disposal facilities</u>, or amendments to currently certified categorical <u>disposal facilities</u>, <u>must provide the following additional information:</u>
    - i. A site characterization that includes information necessary to determine all paths of emission or discharge to the environment and shall be sufficient to model contaminant transport utilizing waste characterization information required in §6-1006(D). The site characterization must address, unless deemed non-applicable by the Secretary:
      - a. Soils and surficial geology.
      - b. Bedrock geology.
      - c. Integrated groundwater geology and geochemistry.
      - d. Topography.
      - e. Surface water.
      - f. Groundwater location and flow direction; including parameters for hydraulic conductivity, transmissivity

g. Potential for preferential pathways and presence of multiple aquifers

### ii. Demonstration:

- a. That the isolation distances from the high seasonal water table, bedrock, and waters are sufficient to assure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and rules;
- b. That the isolation distance to public and private drinking water sources is sufficient to assure that an emission or discharge from the facility will not adversely affect drinking water;
- c. that the isolation distances to property lines, or any of the following not owned by the applicant: residences, schools, day care facilities, hospitals, and nursing homes, are sufficient to assure that the facility will not:
  - a. result in nuisance dust off site of the facility;
  - b. result in an unreasonable visual impact off site of the facility;
  - c. <u>unreasonably increase the level of noise detectable off site of the facility;</u> or
  - d. otherwise adversely affect public health
- d. that the facility complies with the Groundwater Protection Rule and Strategy, as may be amended; and the Vermont Water Quality Standards, as may be amended.
- iii. Any additional information that the Secretary deems necessary to evaluate potential impacts to the public health, and the air, groundwater, and surface water quality. This includes the origin site work required by \$35-512 of the Investigation and Remediation of Contaminated Properties Rule.
- 2. If the Secretary determines that the proposed categorical facility size, processes, disposal activities or the nature of the mining wastes require additional review and oversight, not provided by this section, the Secretary may require that the person apply for a full mining waste facility certification pursuant to §6-503 or deny the application.
- B. <u>In addition to the general application requirements established in §6-503, an application for a new landfill facility shall include the following:</u>
  - 1. <u>Hydrogeological study including, but not limited to, all data, maps, cross-sections, schematics and calculations deemed necessary to accurately determine the physical and chemical characteristics of the overburden and bedrock groundwater characteristics.</u>

- 2. <u>Landfill Siting Report including, but not limited to, supporting evidence that demonstrates compliance with the minimum siting requirements of these rules.</u>
- 3. <u>Landfill design plans including, but not limited to, design and construction specifications of the groundwater protection system, the environmental monitoring systems, the cap and final cover and other appurtenances associated with the facility.</u>
- 4. <u>Landfill operation and maintenance plan including, but not limited to, the sequence and direction of cell, lift and phase development, capacity and life expectancy for each phase and the sequence of placement of interim and final cover.</u>
- 5. Waste Control plan including, but not limited to, a description of how waste will be received and monitored, identification and management of wastes requiring special handling (friable asbestos, sludges etc.), and the program for detecting and preventing disposal of unauthorized wastes (random inspections etc.).
- 6. Construction Quality Assurance and Quality Control plan including, but not limited to, a description of the observations and tests that will be used before, during and upon completion of construction to ensure that construction materials will meet the design and operation criteria.
- 7. Landfill closure plan identifying, but not limited to, all the steps necessary to close the landfill at any point during its active life and the associated closure cost estimate necessary for establishing a financial responsibility instrument.
- 8. <u>Landfill post-closure plan identifying, but not limited to, the monitoring and inspections that will occur following closure in order to maintain compliance with §6-1007 of these rules and the associated post-closure cost estimate necessary for establishing a financial responsibility instrument.</u>
- C. In a case where a municipal solid waste discrete disposal landfill facility is proposed to be located within a 5-mile radius of an airport runway, serving piston-driven or turbojet aircraft, the applicant must provide evidence that the applicant has notified the Federal Aviation Administration (FAA) and the affected airport have been notified. Discrete disposal Landfill facilities which may attract birds located within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft, shall not pose a bird hazard to aircraft and shall include a Bird Hazard Management Plan with their application.
- D. At the request of the Secretary, or as required by §6–1303(a)(1), The applicant shall provide the Secretary with a mining waste or mineral processing waste characterization report, if these materials are being disposed of within the landfill, showing the following information:
  - 1. A description of the mining and industrial process or processes that are taking place at the facility, including a process flow diagram

- 2. A detailed description of all materials processed which generate mining waste or mineral processing waste including identification of:
  - i. Reagents, chemicals or additives used in the mining and industrial process and the point added in that process, including the amount used per year and an estimate of the amount in the waste using a mass balance analysis. A copy of the material safety data sheets for each reagent, chemical or additive used in the industrial process shall be included; and
  - ii. Natural contaminants (including heavy metals, metal salts, fluorine, radioisotopes, asbestos, arsenic) present in the material that is processed
- 3. The annual amount of mining wastes or mineral processing wastes proposed to be treated, stored, or disposed.
- 4. The results of analytical tests of extract from representative samples of the mining waste or mineral processing waste to determine the concentration of metals, organic compounds, volatile compounds, semi-volatile compounds or other contaminants. The analytical results shall be presented in a format approved by the Secretary.
- 5. A statement that the applicant has examined alternative to reduce the amount of reagents, chemicals, or additives in the mining waste or mineral processing waste. The statement shall include potential reuse and recycling options explored by the applicant for the waste. The statement should include a brief description of the alternatives considered and the conclusions reached.
- 6. Any additional information that the applicant or the Secretary believes would assist the Secretary in accurately characterizing the mining waste or mineral processing waste.
- E. Except for facilities that qualify for a categorical certification under §6-1002, the Secretary may not certify a discrete disposal facility unless it is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.
- F. When a certification amendment is requested to authorize a change in the operating plans or facility design, the post-closure plan should also be amended as needed and according to the requirements of 6-1008(G-H) below.

### §6-1007 Disposal Facility Closure

A. A closure plan is required for all facilities operating on the effective date of these rules and all new facilities required to obtain certification under these rules. All facilities subject to closure must be closed in a manner that:

- 1. Minimizes the need for further maintenance related to the waste facility; and
- Controls minimizes or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater or surface waters or the atmosphere.
- B. The approved closure plan <u>submitted at the point of application</u> will become a condition of any certification or other operating authority issued by the Secretary.
- C. An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- D. An amended closure plan must be submitted for approval to the Secretary whenever:
  - 1. Changes in the operating plan or facility design affect the closure plan; or
  - 2. There is a change in the expected year of closure.
  - 3. There is a change in the closure cost estimate or financial instrument.
- E. When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment must be requested at the same time. If a certification modification is not needed to authorize the change in operating plans or facility design, the request for a closure plan amendment must be made within 60 days after the change in plans or design occurs.
- F. Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.
- G. Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.
- H. Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:
  - 1. Certification by the certification holder of the facility and by a professional engineer licensed in the State of Vermont that the facility has been closed in accordance with the specifications of the approved closure plan; and
  - 2. Verification that the owner of the property on which the facility is located has recorded a notation on the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property

that the land has been used as a solid waste management facility.

# §6-1008 Disposal Facility Post-Closure

- A. Except for categorical disposal facilities, a post-closure plan is required where waste or waste constituents remain at or in the facility after closure, and that are operating on the effective date of these rules, or are otherwise required to obtain certification under these <u>FR</u>ules.
- B. The approved post-closure plan, submitted as part of the application, is to become a condition of the facility certification and thus must be implemented immediately upon closure of the facility.
- C. The post-closure period shall be the period of time from closure until a demonstration has been made that the facility has achieved the performance standards necessary for custodial care approval as described in §6-1009.
- D. The post-closure plan must identify the activities that will be carried out after closure to minimize the possibility of an emission or discharge and to demonstrate progression towards the achievement of the custodial care performance criteria. It shall include, at least:
  - 1. A description of the appropriate air, surface water, groundwater monitoring activities <u>at a minimum this must include</u>:
    - i. A plan for monitoring and maintenance of the landfill cover system, erosion control measures, drainage systems, groundwater monitoring networks, leachate collection systems, if applicable, and gas control systems, if applicable. This shall include an annual evaluation of the landfill performed by a registered engineer or approved qualified professional in the month of May. A report on this inspection and the integrity of these systems shall be submitted to the Secretary and include a general assessment of whether the facility systems are sufficient to prevent impacts to human health or the environment.
    - ii. A groundwater monitoring plan developed to demonstrate compliance with the Groundwater Protection Rule and Strategy at the compliance points of the facility.
    - iii. As appropriate, a plan for detection monitoring at potentially impacted sensitive receptors (surface waters, residential wells etc.)
    - iv. A plan for explosive gas management and, as appropriate, explosive gas monitoring.
  - 2. A description and schedule of any planned maintenance activities;
  - 3. The name, address and phone number of the person or office to contact about the facility during the post-closure period; and
  - 4. A post-closure cost estimate <u>pursuant to §6-805 and provisions for financial assurance pursuant</u> to §6-802 or §6-803 as appropriate.

- E. The approved post-closure plan will become a condition of any certification or other operating authority issued by the Secretary.
- F. A post-closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility or during the post-closure period.
- G. An amended post-closure plan must be submitted for approval to the Secretary whenever:
  - 1. Changes in the operating plan, facility design or closure plan, or events that occur during the active life of the facility or during the post-closure period, affect the post-closure plan; or
  - 2. There is a change in the expected year of closure
  - 3. There is a change to the post closure cost estimate and/or the post closure financial assurance document
- H. <u>Prior to closure</u>, when a certification modification is requested to authorize a change in the operating plans or facility design, a post-closure plan amendment must be requested at the same time. In all other cases, the request for a post-closure plan amendment must be made within 60 days after the change in operating plans or facility design or the event that affect the post-closure plan occur.
- I. <u>Upon written approval of the certification of closure from the Secretary, the Permittee shall implement the post-closure plan.</u> A facility's post-closure care period shall continue until the owner or operator can demonstrate that the threat to public health and safety and the environment has been eliminated.
- J. <u>During the post-closure period, the owner or operator must maintain the integrity and effectiveness of the following:</u>
  - 1. The landfill cover system, access controls, erosion controls, drainage systems, groundwater monitoring networks, leachate collection systems, if applicable, and gas control systems, if applicable This shall include making any repairs as necessary to correct for sparse vegetative cover, settlement, erosion, burrowing, deficiencies in the run-on and run-off systems and mowing the vegetative cover at least once a year;
  - 2. Environmental and facility monitoring points
- K. As required by the approved post-closure plan and described in §6-1007(D), the owner or operator shall submit the following to the Secretary:
  - 1. Copies of the inspection reports shall be submitted within 30 days of completion of the inspection;
  - 2. Copies of all water quality reports shall be submitted within 60 days following the sampling event at the facility; and

- 3. <u>Notification within 7 days of any damage, malfunction or sub-standard performance at the</u> facility.
- L. Upon the satisfactory demonstration by the certification holder that the post-closure care requirements have been completed in accordance with the approved post-closure plan, the Secretary shall, at the request of the certification holder provide a written notification of the completion of post-closure care.
- M. A notification provided under this section by the Secretary shall in no way preclude the liability provisions of 10 V.S.A. §6615.
- N. At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification will have the existing certification rescinded and will be approved for post-closure care management under these rules and under their current approved post-closure plan, post-closure cost estimates and financial assurance instruments.

# §6-1009 Disposal Facility Custodial Care

- A. In order for Post-closure Care to be considered complete, the owner/operator must submit a written request and accompanying documentation to the Secretary that demonstrates that the facility is stable and poses no threat to human health or the environment without further maintenance or monitoring beyond the associated provisions of custodial care outlined in 6-1009(F).
- B. This written request should be prepared under the direction of a professional engineer, licensed in the State of Vermont, and, a minimum, address the following performance criteria standards:

### 1. Groundwater Quality

- i. <u>Concentrations of all contaminants attributed to the facility must be stable, decreasing, or non-detectable over the most recent five-year period;</u>
- ii. It must be demonstrated that contaminants do not reach or exceed Groundwater

  Enforcement Standards (GWES) as established in the Groundwater Protection Rule and

  Strategy at the point of compliance. In the absence of a GWES, any US EPA Maximum

  Contaminant Level (MCL) or Vermont Health Advisory (VHA) would apply. Statistical

  significance of detections may be used to demonstrate compliance as approved by the

  Secretary.

### 2. Landfill Gas Emissions

- i. <u>Methane concentrations, if monitored, in monitoring wells must be stable, decreasing or</u> non-detectable over the most recent five-year period;
- ii. Methane emissions must not have the potential of reaching or exceeding 25% of the Lower Explosive Limit (LEL) at the property boundary or in facility buildings or result in

objectionable off-site odors.

iii. Any established gas venting system, including passive venting, is fully operational or is decommissioned if determined to be no longer necessary.

## 3. <u>Leachate Management (if collected)</u>

i. <u>Leachate quality and quantity must be demonstrated to be stable, decreasing or non-detectable over the most recent five-year period with no GWES, MCL or VHA exceedances for a minimum of a two consecutive semi-annual monitoring events.</u>

## 4. Final Cover Integrity

- i. Waste decomposition and settlement rates must be shown to be negligible and that future settlement will not affect integrity of the final cover system;
- ii. Vegetative cover must be uniformly well-established, stable and resistant to erosion.

### 5. Surface Water System

- i. The surface water diversion system must be shown to continue to prevent surface water flow on the capped landfill during the peak discharge from a 25-year, 24-hour storm event;
- ii. Surface water discharge from the facility does not and will not violate Vermont Water Quality Standards, or any requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES).

### 6. Institutional Controls

i. Evidence must be provided that demonstrates that institutional controls (e.g. land record notices, deed restrictions, access controls) are in place. A land record notice should be formally recorded at the Town Clerk's office with an official copy of the record submitted at the time of the custodial care request.

### 7. Corrective Actions

i. <u>Documentation that any mandated corrective actions (e.g. waste removal, structural improvements, groundwater remediation) have been successfully preformed.</u>

### 8. End Use Plans

i. Evidence that the facility owner has identified the end use activities to occur at the facility and that these activities will not pose a threat to human health or the environment.

- 9. Adjoining Landowner Notification
  - i. Written notification must be provided to all adjoining landowners at the post of application for post-closure care cessation. Evidence of this notification should be provided along with the written request.
- C. If the Secretary determines that the findings of 6-1009(B) cannot be made, the Secretary will notify the owner/operator of the basis for denial of post-closure care completion. This denial will require the continuation of post-closure care and/or implementation of corrective action. If post-closure care is required to continue, the Secretary may consider modification of specific post-closure care activities provided that the modifications do not increase the threat to human health or the environment or jeopardize the data availability necessary for evaluating the facility impacts.
- D. If the findings of §6-1009(B) can be made, the Secretary will notify the owner/operator of their approval for custodial care. The transition from post-closure care to custodial care occurs at the point of written notification from the Secretary.
- E. <u>Upon custodial care approval</u>, the facility owner/operator shall properly close and abandon all groundwater monitoring wells in accordance with §12.3.5 of Appendix A of the Vermont Water Supply Rule and discontinue any existing active gas control systems.
- F. The approval for cessation of post-closure care and initiation of custodial care does not relieve the owner/operator from taking necessary corrective actions to protect human health and the environment. The Secretary maintains the authority to compel such actions under 10 V.S.A. §6615. Nor does custodial care approval release the owner/operator from potential liability to third parties resulting from releases which occur(red) during the operating life, closure period, post-closure period or custodial care period.
- G. The Agency of Natural Resources recommends that landfill owners maintain a minimal inspection and documentation program throughout the custodial care life-time. These annual activities include but are not limited ensuring and documenting the maintenance and management of: facility access controls, landfill cap integrity, institutional controls and intended end uses of the facility. Beneficial uses of the closed facility are acceptable, but proposed modifications to the end use activities require prior approval by the Secretary and must not disturb the integrity of the waste containment systems.
- H. At the point of this rule's promulgation, all owner/operators who have previously received a postclosure certification which contained the approval the transition from post-closure care management to custodial care management will have the existing certification rescinded and will be approved for custodial care.

## **Subchapter 11 – Compost Facilities**

## §6-1101 Applicability

- A. Notwithstanding the other requirements of these rules, this Subchapter applies to persons engaged in composting and organics management activities where the wastes being composted do not contain any amount of sewage sludge, domestic septage, or septage. Composting activities where the wastes being composted do contain any amount of sewage sludge, domestic septage, or septage shall be managed as diffuse disposal facilities.
- B. The siting requirements of §6-1107 and the liquid management standards of §6-1108 shall not apply to facilities permitted prior to March 15, 2012 [effective date of this rule]. A lateral expansion, or a significant improvement or an increase in processing capacity to at a facility permitted subsequent to March 15, 2012 [the effective date of this rule] shall require the facility to meet the siting requirements for the expansion and the liquid management standards for the facility. The Secretary may require a facility to meet the liquid management standards of §6-1108 as necessary to protect the environment.
- C. This subchapter does not apply to sewage sludge and septage. <u>Refer to Subchapter 13 for regulation of</u> these materials.

# §6-1102 Organic Specific Definitions

As used in this Subchapter and Subchapter 12 the following definitions apply:

- A. "Actively aerated" means forcibly inducing the flow of air through a compost pile or windrow utilizing mechanical means, such as electrically powered blowers and is accomplished by a pile design which incorporates perforated piping or other mechanisms to direct air flow through the pile.
- B. "Aerated piles" means inducing natural flow of air through a free standing compost pile or windrow through proper compost pile design.
- C. "Anaerobic digestion" means the controlled anaerobic decomposition of organic food residuals, manure, animal feed waste, other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.
- D. "Clean high carbon bulking agent" means the materials defined as clean high carbon bulking agents in the procedure entitled "Approved clean high carbon bulking agents for use at composting facilities" dated March 21, 2012 as may be amended.
- E. "Compost" means the product of composting; consisting of a group of organic residues or a mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition.
- F. "Compostable" means a product, package or material that will safely decompose, in a composting system, into a humus-like material, that can be safely used as a beneficial soil amendment.

- G. "Composting" means the controlled biological decomposition of organic matter through active management to produce a stable humus-like material but shall not mean sewage, septage, or materials derived from sewage or septage.
- H. "Compost facility operator" means a person who operates a composting facility regulated under this subchapter.
- I. "Compost management area" means an area used for the unloading and storage of feed stocks, and active and curing compost. Compost management area does not include the area used for the management of runoff or leachate and does not include areas where finished compost is stored.
- J. "Compost tea" means a product produced by mixing finished compost with water and incubating the mixture to make a product used for soil enrichment. Compost tea may actively aerate the mixture or add additives to increase the microbial population during its production.
- K. "Contaminant" means any non-biodegradable material which lends impurity to compost, including but not limited to, glass, metal, plastics, and ceramics.
- L. "Curing" means the final stage of composting in which stabilization of the compost continues after much of the readily metabolized material has decomposed. Curing occurs after material has met the treatment process for compost required by this subchapter.
- M. "Digestate" means the remaining solid and liquid derived from the finished stage of in-vessel anaerobic digestion.
- N. "Farm" means a place used for agricultural or horticultural use and/or cultivation or management of land for orchard crops or food, fiber, Christmas trees, maple sap and maple syrup products, animal husbandry, fish or bees or a greenhouse operation, on-site storage of agriculture products principally produced on the farm or the on-site production of fuel or power from agriculture products or waste principally produced on the farm.
- O. "Food processing residual" means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants.
- P. "Food residual" means-compostable material derived from processing or disposal of food, excluding pre- and post-consumer food scraps which are compostable material. Excludes food processing residuals derived from the processing of meat and meat products such as animal slaughtering and rendering operations. Food residuals may include pre- and post-consumer food scraps.
- Q. "Leachate" means liquid containing dissolved, suspended, or miscible materials that passes through or emerges from the active compost area. "Leachate" does not include liquid containing dissolved, suspended, or miscible materials that pass through or emerges from the area where compost is curing, or storage of finished product.
- R. "Leaf and yard residual" means compostable untreated vegetative matter, including but not limited to grass clippings, leaves, Kraft paper bags and brush, which are free from contaminants. It does not include such materials as pre and post-consumer food residuals, food processing residuals or soiled paper.

- S. "Organics" means any carbon based plant or animal material or byproduct which will decompose into soil. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.
- T. "Passively aerated" means inducing the flow of air though a free standing compost pile or windrow.
- U. "Specified risk material" means tissues of ruminants that could contain Bovine Spongiform Encephalopathy causing prions as defined by the United States Department of Agriculture. These tissues include the tonsils, skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged 30 months or older and the tonsils and distal ileum of the small intestine of all cattle.
- V. "Vermicomposting" means a method of composting utilizing red worms or similar worms to breakdown organic material into a nutrient rich soil amendment.
- W. "Untreated wood residual" means untreated wood as defined in §6-201.

## §6-1103 Organics Specific Exemptions

- A. The following activities are exempt from the requirements of this subchapter:
  - 1. A person composting 100 cubic yards or less annually of combined feedstocks is not subject to regulation under these rules.
  - 2. Facilities that manage less than 3,000 cubic yards per year of solely leaf, yard, plant and untreated wood residuals provided that not more than 20 percent of the residuals are grass clippings.
  - 3. Food residuals when <u>anaerobically</u> digested provided that the residuals do not exceed <del>one</del> five percent of the design capacity of the digester.
  - 4. Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment:
    - i. any amount of animal manure;
    - ii. any amount of absorbent bedding; and
    - iii. any amount of clean high carbon bulking agent.
  - 5. Facilities located on a farm that compost vegetative farm waste from a farm.
  - 6. The composting of less than 1,000 cubic yards of food processing residuals <u>per year</u> when the composting takes place on a farm.

- 7. Facilities located on a farm that compost animal mortalities and slaughter house waste from the farm.
- 8. The disposal of animal mortalities when disposed on a farm when the mortalities are from the farm.
- 9. Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:
  - i. One-hundred-fifty (150) feet from the property line or surface waters,
  - ii. three (3) feet above the seasonal high water table,
  - iii. two hundred feet from public or private drinking water supplies; and
  - iv. covered with a minimum of 24 inches of soil.
- 10. Household pet burial on owner's property.
- 11. The treatment or disposal of animal, bird, and fish species resulting from an emergency declaration to control the spread of disease, provided that the disposal activities occur in consultation with the Secretary. In the case of domestic animals, the declaration shall be issued by the Secretary of Agriculture, Food & Markets, in accordance with the authorities provided under 6 V.S.A.§§ 1159 and 1464. In the case of wild animal, bird, and fish species, such declaration shall be issued by the Commissioner of the Department of Fish and Wildlife in accordance with the authorities provided under 10 V.S.A.§ 4136.
- 12. Pet cemeteries. For purposes of this subdivision a pet cemetery means any plot of ground used, or intended to be used, for the permanent burial or disposition of the remains of a pet in a grave, a mausoleum, a columbarium, a vault, or other receptacle.
- 13. Any person feeding 60 or fewer chickens no more than two (2) pounds of food residuals or less per bird, per day, is exempt from these Rules.
- 14. Any person feeding more than 60 chickens no more than two (2) pounds of food residuals or less per bird, per day, is exempt from these Rules provided they do not cause a threat to the environment, public health and safety and do not create a nuisance.

# §6-1104 Compost Facility Types

- A. Small Composting Facility
  - 1. This section applies to composting facilities that:

- i. compost 5,000 cubic yards per year or less of total organics of which not more than 2,000 cubic yards per year or less are food residuals or food processing residuals;
- ii. manage 10,000 cubic yards or less per year of solely leaf, yard, and untreated wood residuals;
- iii. do not compost animal mortalities, slaughterhouse waste, or offal; and
- iv. have a compost management area four acres or less in size; and
- v. are feeding food residuals to more than 60 chickens and at the request of the Secretary are required to be regulated as a small composting operation due to having created a negative health and safety and or negative environmental conditions.
- 2. A facility exempt from Act 250 pursuant to 10 V.S.A. § 6001 (3)(D)(vii)(VI) is not eligible to be registered as a small compost facility under this section and shall apply for a permit as a medium compost facility under § 6-1108.
- 3. Facilities registered under this section and in compliance with this <u>Subchapter section</u>, the facility registration, and its facility management plan shall be considered operating consistent with accepted composting practices and subject to the permit limitations of 10 V.S.A. 6605j.
- B. Medium Scale Composting Facility This section applies to composting facilities that:
  - 1. have a compost management area of less than 10 acres in size; and
  - 2. compost the following materials:
    - i. more than 10,000 cubic yards per year of leaf and yard waste; or
    - ii. compost 40,000 or less cubic yards per year of total organics any of the following feedstocks:
      - a. not more than 5,000 cubic yards per year are food residuals or food processing residuals.
      - b. not more than 10 tons of animal, animal offal, and butcher waste per month.
- C. Large Composting Facility This section applies to composting facilities of a size that precludes them from qualifying for a small compost facility registration or a that do not qualify medium categorical composting certification as provided in this section above under § 6-1105.

### §6-1105 Compost Facility Siting

- A. Compost facilities are not subject to the general siting requirements provided in Subchapter 7 of these rules, rather the facility specific siting requirements of this section apply.
- B. Vermicomposting facilities regulated under this subchapter are not required to meet siting criteria provided that all activities occur within an enclosed structure with an impermeable floor.
- C. A composting operation registered to operate under this section A composting facility shall not construct the compost management area or the area used to treat leachate and run-off within the following siting minimum distances. The following siting distances shall not affect another property owner's ability to conduct activities not regulated by these rules:
  - 1. minimum of 300 feet from the nearest public or private water supplies not owned by the applicant;
  - 2. minimum of 3 feet from seasonal high water table and bedrock;
  - 3. minimum of 100 feet from surface water:
  - 4. minimum of 100 feet from all property lines and edge of public roads; and
  - 5. minimum of 300 feet from all residences not owned by the applicant and from all public buildings.
- D. <u>A composting facility</u> Prohibited areas. A composting operation registered to operate under this section shall not construct the compost management area or the area used to treat <u>or infiltrate</u> leachate and run-off in accordance-within the following prohibited areas:
  - 1. The 100 year flood plain as shown on the National Flood Insurance Maps;
  - 2. A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary.
  - 3. A class III wetland unless authorized by the Secretary.
  - 4. Any location within a municipality where that municipality has prohibited compositing as a part of its zoning bylaws.
  - 5. Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
- E. <u>In addition, large composting facilities shall not construct the compost management area and any area</u> used to treat or infiltrate leachate or run-off within:

- i. 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft;
- ii. within 1,000 feet of a residential housing unit located within an area that has a residential housing density of 3 units per acre or greater.

## §6-1106 Compost Facility Design Standards

- A. Small Composting Facilities
  - 1. <u>Liquids management</u>. Composting activities shall be <u>managed designed</u> in a manner that prevents discharges off site and to surface waters. At a minimum, the facility shall <u>conform be</u> designed to the following to meet that standards:
    - Clean stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the area used for the management of run-off and leachate from the compost management area. This shall be accomplished using berms, swales, and other similar controls.
    - ii. The compost management area shall be constructed with an average slope between two and five percent. The slope shall be maintained so that ponding in the compost management area will not occur.
    - iii. All run off and leachate shall be managed on property owned or leased by the registrant.
  - 2. A registrant shall manage leachate from the compost management area through the use of a vegetative area for the treatment of leachate and stormwater run-off from the compost management area designed and maintained in the following manner:
    - i. The vegetative treatment area shall be, at a minimum, equal to the area of the compost management area.
    - ii. The vegetative treatment area shall be equal in length to the contributing length of the compost management area in the downslope direction.
    - iii. The vegetative treatment area shall be located on an area with a slope of less than or equal to five percent and shall be managed to prevent the ponding or pooling of liquids in the area.
    - iv. The vegetative treatment area shall be maintained and operated to slow the movement of liquids off the site and promote the uptake of liquids into the vegetation or infiltration of liquids into the soils.
    - v. Any berms, swales or ditches used to convey water from the compost management area to the vegetative treatment area shall use finished compost, bark, stone, and fabric in the construction to filter suspended solids and excess nutrients from leachate.
- B. Medium and Large Compost Facilitates

- 1. A compost <u>The facility</u> shall divert all clean stormwater run-off from surrounding up-gradient areas and prevent it from running onto the compost management area. This shall be accomplished through the use of berms, swales, grading, and other controls.
- 2. The compost facility shall not have an unpermitted discharge of leachate or runoff to a surface water.
- 3. All material that has not met the treatment standard defined in § 6-1107(D), excluding leaf and yard residuals and high carbon bulking agents, shall be located on an average slope of between two and five percent. The slope shall be maintained so that ponding in the compost management area will not occur. The area for this material shall be located on the following:
  - i. an impervious pad; or
  - ii. improved native soils as approved by the Secretary; or
  - iii. a compacted gravel pad meeting a <u>hydraulic</u> conductivity of 1x10<sup>-7</sup> cm/sec as approved by the Secretary.
- 4. Facilities are required to collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following construction standards:
  - i. be single lined with a natural or synthetic liner that has a maximum permeability of 10<sup>-7</sup> cm/sec, in a design approved by the Secretary;
  - ii. be constructed in accordance with Natural Resource Conservation Service code 378 standards and approved by the Secretary; or
  - iii. be a waste management lagoon constructed consistent with the Agency of Agriculture, Food, and Markets standards.
- 5. Leachate storage areas shall, at all times, maintain a minimum of two feet of freeboard and be isolated from public access with fencing. Acceptable treatment options include the following:
  - i. Collection and treatment at a permitted wastewater treatment facility;
  - ii. Collection and application to active composting piles in a manner approved by the Secretary;
  - iii. Treatment on site in a manner approved by the Secretary;
- 6. Acceptable treatment for run-off collected from compost curing areas include:
  - i. Collection and treatment at a permitted wastewater treatment facility;
  - ii. Collection and application to active composting piles in a manner approved by the Secretary, if used to wet compost that has achieved the treatment standards established in

§ 6-1107(D),

- iii. Treatment on site in a manner approved by the Secretary;
- iv. Collection and land application under a nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management with the following restrictions:
  - a. Application rate shall not exceed 25,000 gallons per acre per day.
  - b. Liquid application shall not occur when the fields are saturated, frozen, or snow covered or when ponding occurs.
  - c. The application shall not result in an offsite discharge or a discharge to surface water.
- 7. The design, construction, and operation of the facility shall comply with the Vermont Groundwater Protection Rule and Strategy as may be amended.
- 8. Testing of leachate and run-off may be required dependent on the approved feedstocks accepted at the facility.

# **§6-1107** Compost Facility Operating Standards

# A. Small Composting Facility

- 1. A composting operation registered to operate under this section shall not conduct any of the following prohibited activities:
  - i. The discharge of any waste or wastewater from the operation of the facility into surface waters or wetlands.
  - ii. The construction of any basin, trench, pond, or depression with the purpose of discharging run off or leachate to groundwater.
  - iii. The operation or management of the facility in a manner that causes a nuisance condition.
- 2. Small composting facilities shall be managed to properly compost materials, destroy pathogens, not create a threat to public health <u>and safety</u> or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions. The facility shall conform to the following to meet that standard:
  - i. The compost feedstocks shall be limited to those listed on the procedure entitled "Approved feedstocks for small facilities registered to operate under acceptable composting practices" dated [date of signature] March 21, 2012 as may be amended.

- ii. The clean high carbon bulking agents shall be limited to those listed on the procedure entitled "Approved clean high carbon bulking agents for use at composting facilities" dated March 21, 2012 as may be amended.
- iii. All recipes shall be designed to ensure that the initial compost mix results in:
  - a. A carbon to nitrogen (C:N) ratio of 20:1 to 40:1
  - b. A bulk density of less than 1,200 pounds per cubic yard
  - c. A pH in the range of six to eight S.U.
- iv. The pile size and windrow or pile, at the time of construction, shall be not greater than ten-twelve feet at the base and a maximum height of six feet.
- v. Compost stability. All finished products shall meet the following prior to marketing or distribution for sale:
  - a. Temperature decline to near ambient conditions (less than 100° F) provided that the decline is not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - b. At a minimum, at least two of the following analyses shall be required annually if the Agency suspects, either through site inspections or complaint investigations, that compost is being distributed off-site before it matures:
    - aa. Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.
    - ab. Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
    - ac. Solvita<sup>TM</sup> Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.
    - ad. Carbon dioxide evolution. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.
    - ae. Ammonia/Nitrate ratio of less than 3.

- af. Plant tests conducted in a manner approved by the Agency.
- vi. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

Parameter	Maximum Total Concentration
Fecal Coliform	1,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)

vii. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters <u>must be completed</u> annually.

Parameter	Maximum Total Concentration (mg/kg dry weight)
Arsenic	15
Cadmium	21
Chromium	1,200
Copper	1,500
Lead	300
Mercury	10
Nickel	420
Zinc	2,800

- 3. Record keeping requirements. The compost facility shall keep records for the following activities at the facility office in a dry and secure location available for review for five years. At a minimum, records on the following shall be retained:
  - i. <u>If composting food residuals</u>, the temperature of the compost windrows shall be monitored on a daily basis during the treatment process. The temperature should be monitored at one foot and three foot depths every five linear feet of windrow at the base of the windrow while achieving the treatment standards established in §6-1107(D)(4) subsection (j)(4) of this section.
  - ii. weekly amounts, recorded in either tons or cubic yards, and types, of incoming compost feedstock;
  - iii. annual amount of compost produced in cubic yards;

- iv. annual amount of contaminants disposed of and;
- v. copies of all analytical results for maturity, bacteriological and metals testing as required by  $\S6-1107(A)(2)(v-vii)$  above subsection (g)(5), (6) and (7).
- 4. A facility that uses food residuals or food processing residuals as a compost feedstock shall comply with the requirements of §6-1107(D).
- 5. Food residuals or food processing residuals shall be managed as follows:
  - i. The food residuals shall be incorporated into the compost mix the same day the residuals arrive at the facility; or
  - ii. The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of the residuals arrival at the facility.
- 6. Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and all non-compostable material removed either manually or mechanically. All non-compostable materials shall be disposed of at a certified solid waste facility.
- 7. Screening of finished compost. The finished compost shall be screened to remove any remaining contaminants. All contaminant materials shall be disposed of at a certified solid waste facility.
- 8. Treatment of food residuals. The composting of food or food processing residuals shall use one of the following treatment methods:
  - i. If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 13 of 16 consecutive days, during which time the materials must be turned not fewer than five times to ensure that all materials reach this temperature.
  - ii. If using an actively or passively aerated static pile or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.
- 9. Leaf and yard residual composting facilities. Facilities that compost leaf and yard residuals shall also meet the following requirements:
  - i. Pile Construction. Incoming leaf and yard residuals, and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ten feet high by 15 to 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - ii. Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one-part grass to three parts leaf or wood residuals by volume within 24 hours of receipt at the facility. The composting facility must not accept grass

- clippings unless there is a sufficient volume of high carbon feed stocks available to meet this ratio.
- iii. Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.
- iv. Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
- v. Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.
- 10. Facility operator training. The facility operator shall complete an approved operator training course within 6 months of filing the registration with the Secretary.

Note: A list of approved operator training requirements can be found at the Agency's website.

11. If the Secretary determines that the proposed facility size, processes, activities, or the nature of the composting activities require additional review and oversight not provided by this section, the Secretary may require that the applicant apply for a certification pursuant to § 6-1104(B).

## B. Medium Scale Composting Facility

- 1. The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- 2. The facility shall be managed to properly compost materials, destroy pathogens, not create a threat to public health or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions.
- 3. Unless an alternative is approved as a part of the facility management plan the initial compost mix shall result in:
  - i. A carbon to nitrogen (C:N) ratio of 20:1 to 40:1.
  - ii. A bulk density of less than 1,200 pounds per cubic yard.
  - iii. A pH in the range of six to eight S.U.
- 4. A facility that uses food residuals or food processing residuals as a compost feedstock shall comply with the requirements of § 6-1107(D).
- 5. A facility that uses animal mortalities, offal, or butchering waste as a compost feedstock shall comply with the requirements of § 6-1107(F).

- 6. A facility that uses leaf and yard residuals as a compost feedstock shall comply with the requirements of §6-1107(B)(11)subsection (f) of this section.
- 7. Compost Stability. Finished products marketed or distributed for sale shall be tested for two of the following methods listed below:
  - i. Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - ii. Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.
  - iii. Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
  - iv. Solvita<sup>TM</sup> Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.
  - v. Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.
  - vi. Reduction in organic matter (ROM) of at least 60 %
  - vii. Plant tests conducted in a manner approved by the Agency.
- 8. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following metals concentrations.

Parameter	Maximum Total Concentration (mg/kg dry weight)
Arsenic	15
Cadmium	21
Chromium	1,200
Copper	1,500
Lead	300
Mercury	10

Nickel	420
Zinc	2,800

9. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

Parameter	<b>Maximum Total Concentration</b>
Fecal Coliform	1,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)

- 10. Facility operator training. A minimum of one person at the facility on any operating day shall have completed an approved operator training course within six months of the issuance of the certification. A list of approved operator training requirements can be found at the Agency's website.
- 11. Leaf and yard residual facilities. Facilities that solely compost leaf and yard residuals shall also meet the following requirements:
  - i. Pile Construction. Incoming leaf and yard residuals and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ten feet high by 15 to 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - ii. Grass. Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one-part grass to three-parts leaf or untreated wood by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon feed stocks available to meet this ratio.
  - iii. Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.
  - iv. Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
- 12. Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.
- C. Large Scale Composting Facilities

- 1. The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- 2. The facility shall be managed to properly compost materials, destroy pathogens, not create a threat to public health or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions.
- 3. Unless an alternative is approved as a part of the facility management plan the initial compost mix shall result in:
  - i. A carbon to nitrogen (C:N) ratio of 20:1 to 40:1.
  - ii. A bulk density of less than 1,200 pounds per cubic yard.
  - iii. A pH in the range of six to eight S.U.
- 4. A facility that uses food residuals or food processing residuals as a compost feedstock shall comply with the requirements of § 6-1107(D).
- 5. A facility that uses animal mortalities, offal, or butchering waste as a compost feedstock shall comply with the requirements of § 6-1107(F).
- 6. Compost Stability. Finished products marketed or distributed for sale shall be tested for two of the following methods listed below:
  - i. Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - ii. Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.
  - iii. Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
  - iv. Solvita<sup>TM</sup> Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.
  - v. Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.
  - vi. Reduction in organic matter (ROM) of at least 60 %

- vii. Plant tests conducted in a manner approved by the Agency.
- 7. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following metals concentrations:

Parameter	Maximum Total Concentration (mg/kg dry weight)
Arsenic	15
Cadmium	21
Chromium	1,200
Copper	1,500
Lead	300
Mercury	10
Nickel	420
Zinc	2,800

8. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

 Parameter	Maximum Total Concentration
Fecal Coliform	1,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)

9. Facility operator training. A minimum of one person at the facility shall complete an approved operator training course within six months of the issuance of the certification.

Note: A list of approved operator training requirements can be found at the Agency website.

- D. Food and Food Processing Residuals At Medium and Large Composting Facilities
  - 1. Food residuals or food processing residuals shall be managed as follows:
    - i. The residuals shall be incorporated into the compost mix the same day it arrives at the facility; or
    - ii. The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of its

arrival at the facility.

- 2. Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and non-compostable materials either manually or mechanically removed. All non-compostable materials shall be disposed of at a certified solid waste facility.
- 3. Screening of finished compost. The finished compost shall be screened to remove non-compostable materials. All non-compostable materials shall be disposed of at a certified solid waste facility.
- 4. Treatment of food residuals. The composting of food or food processing residuals shall use one of the following treatment methods:
  - i. If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 13 of 16 consecutive days, during which time the materials must be turned to ensure that all materials reach this temperature.
  - ii. If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.
  - iii. <u>Medium or large compost facilities may utilize</u> Another method that reduces pathogens to the extent equivalent to the reduction achieved by the methods in subsections (D)(4)(i) or (D)(4)(ii) of this section, which is when approved by the Secretary.

## E. Animal Burial Standards Categorical Certifications

- 1. This section applies to the burial or disposal of all non-exempt animal mortalities, animal offal, and butchering waste.
- 2. Composting and burial prohibited. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- 3. Emergency situations. When the Secretary determines that an emergency event has occurred that requires the disposal of animal mortalities from that event, the Secretary may authorize a one-time disposal event in accordance with § 6-301(c). To the maximum extent practical, the disposal event shall conform to the requirements of §6-1107(E)(4) subsection (d) of this section.
- 4. Applications for animal burial shall apply for a permit as follows:
  - i. The facility shall be sited and constructed in conformance with § 6-1105.

- ii. The facility shall meet the following:
  - a. The pit must be managed so that the carcasses do not attract pests or vectors;
  - b. Upon deposit in the pit the carcasses shall be:
    - aa. immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 2 feet of soil; or
    - ab. immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 6" of soil and covered with boards; or,
    - ac. managed in an alternative manner if approved in advance by the Solid Waste Program;
  - c. Active pits must have snow fencing, or equivalent around the perimeter until the top of pit is at ground level;
  - d. No carcasses shall be deposited within two feet of the surface;
  - e. Final cover shall consist of at least two feet of compacted soil.
- 5. Notice. On or before the date of filing any certification application or an amendment thereto, the applicant shall send notice and a copy of the application to the solid waste planning entity, to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall also notify all adjoining residences and landowners. The notice shall inform interested persons that they have 14 days to comment on the application and that comments may be sent to the Department of Environmental Conservation, Solid Waste Management Program. The applicant shall furnish the secretary the names of those noticed of the application.
- 6. Public informational meeting. Upon a written request from a party identified in § 6-305(a)(9), or upon the Secretary's own motion, the Secretary shall hold a public informational meeting on the application. The request shall be made within 14 days of the Secretary's receipt of the application. Upon determining to hold a public informational meeting the Secretary shall:
  - i. schedule and convene a public informational meeting;
  - ii. extend the public comment period for a period not less than three days and not more than seven days from the date of the public informational meeting; and
- 7. require that the applicant provide notice of the application to all persons notified under subsection (e)(1) of this section.

## F. Animal Mortality Composting Facility

- 1. Applicability. This section applies to a facility that includes animal mortalities, animal offal, or butchering waste as a compost feedstock
- 2. Composting and burial prohibited. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- 3. Emergency situations. When the Secretary determines that an emergency event has occurred that requires the composting of animal mortalities from that event, the Secretary may authorize a one-time composting event in accordance with an issued Insignificant Waste Management Event Approval (IWMEA) as provided for in §6-504(B) § 6-301(e). To the maximum extent practical, the disposal event shall conform to the requirements of this subsection (d) of this section.
- 4. Compost pile management. Composting of animal mortalities, animal offal and butchering waste must comply with the same application standards as Section 6-1105 and include the following operational standards:
  - i. Feedstock management. The feedstock shall be incorporated into the compost mix when it arrives at the facility.
  - ii. Compost pile construction. Compost piles shall be constructed in the following manner:
    - a. Prepare a 24-inch depth bed of bulky, absorbent organic material such as wood chips or similar material. Ensure the base is large enough to allow for two-foot clearance around the carcass.
    - b. Lay animal in the center of the bed. Lance the rumen to avoid bloating and possible explosion.
    - c. Cover carcass with two feet of a dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process).
    - d. For small animals, layer mortalities with a minimum of two feet of carbon material between layers.
    - e. Add cover material as necessary to maintain the two-foot cover.
- 5. Monitoring and Turning Requirements.
  - i. The composting of animal mortalities shall use one of the following treatment methods:
    - a. If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at

- 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.
- b. Another method that reduces pathogens to extent equivalent to the reduction achieved by the methods in subsection (d)(3)(A)(i) of this section, which is approved by the Secretary.
- ii. The compost shall not be turned until at least the third month of composting.
- iii. After three months treatment, if the requirements of §6-1107(F)(5)(i) of this section have been met, the permittee may visually examine the compost pile to determine whether the piles may be turned based upon whether the mortalities have degraded (with the exception of bones) and no odors are evident.
- 6. Compost that contains specified risk material from ruminants or carcasses of ruminants greater than 30 months old cannot be distributed off-site and must be managed on land owned or controlled by the permittee.
- 7. If finished compost is to be sold or distributed off-site it shall meet the testing requirements in § 6-1105 (e)(7), (8) and (9).

## §6-1108 Compost Facility Applications

#### A. Small Composting Facility

- 1. Registration. No person shall operate a compost facility without registering that facility with the Secretary on a form provided by the Secretary and providing a copy of the facility management plan. A copy of the facility management plan and registration form shall also be provided to the solid waste planning management entity. At a minimum the form shall contain the following:
  - i. The name and contact information for the facility registrant.
  - ii. The name and location of the facility registered under this section.
  - iii. A certification by the facility registrant that the facility has been sited, designed, constructed, and will be operated in accordance with these rules.
  - iv. A statement by the facility owner that a copy of the registration was sent to the municipality and to the solid waste planning entity where the facility is located.
  - v. Prior to submitting a registration, the applicant shall obtain a letter from the local solid waste planning entity that the facility is acceptable under its plan.

# B. Medium Scale Composting Facility

- 1. Acceptable under solid waste implementation plan. Prior to submitting an application, the applicant shall obtain a letter from the local solid waste planning entity that the facility is acceptable under its plan.
- 2. Notice. On or before the date of filing any certification application or an amendment thereto, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall also notify all adjoining residences and landowners. The notice shall inform interested persons that they have 14 days to comment on the application and that comments may be sent to the Department of Environmental Conservation, Solid Waste Management Program. The applicant shall furnish the secretary the names of those noticed of the application.
- 3. Public informational meeting. Upon a written request from a party identified in §6-305(a)(9), or upon the Secretary's own motion, the Secretary shall hold a public informational meeting on the application. The request shall be made within 14 days of the Secretary's receipt of the application. Upon determining to hold a public informational meeting the Secretary shall:
  - i. schedule and convene a public informational meeting;
  - ii. extend the public comment period for a period not less than three days and not more than seven days from the date of the public informational meeting; and,
  - iii. require that the applicant provide notice of the meeting to all persons notified under subsection (j)(1) of this section.
- 4. If the Secretary determines that the proposed facility size, processes, activities, or the nature of the composting activities require additional review and oversight not provided by this section, the Secretary may require that the person apply for a certification pursuant to § 6-1108(C).
- 5. Application Requirements. In order to qualify for a medium scale compost certification, the applicant shall submit an application which provides the following information:
  - i. The requirements of §6-504;
  - ii. Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading and unloading areas; wash area for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable.
  - iii. Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting criteria and prohibited areas established under § 6-1105.

- iv. Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.
- v. Management plan detailing, at a minimum:
  - a. expected volume and type of incoming materials;
  - b. methods for achieving odor control;
  - c. methods for achieving noise control;
  - d. methods for controlling vectors, dusts, and litter;
  - e. methods for achieving the liquid management standards at §6-1106(B);
  - f. methods to inspect loads and remove non-compostable materials or contaminants from the incoming feedstocks;
  - g. a description of the composting process and how that process will meet the standards established under § 6-1107(D);
  - h. fire prevention and control measures;
  - i. list of equipment to be used;
  - i. hours of operation;
  - k. access control;
  - 1. product distribution; and,
  - m. a sampling plan for maturity, bacteriological and metals testing of the finished compost as required by §6-1107(B) of this section.

#### C. Large Composting Facility

- 1. Applications for certification under this section shall be treated as solid waste facility certifications and shall address the following:
  - i. the requirements of §6-503 §§ 6-304(e)(10) (financial responsibility); (11) (closure plan); (13) (planning requirements of 10 V.S.A. § 6605(e)); and (14) (background disclosure requirements of 10 V.S.A. § 6615f 6605f);
  - ii. submit a plan for effective public notice as required by § 6-304(h); and

- iii. be subject to the application review requirements of §6-601.
- 2. Application Requirements. In order to qualify for a large scale compost certification, the applicant shall submit an application which provides the following information:
  - i. Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading/unloading areas; wash areas for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and runoff; and water quality sampling points, if applicable established by § 6-1106(B).
  - ii. Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting features and prohibited areas.
  - iii. Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.
  - iv. Management plan detailing, at a minimum:
    - a. expected volume and type of incoming materials;
    - b. methods for achieving odor control;
    - c. methods for achieving noise control;
    - d. methods for controlling vectors, dusts, and litter;
    - e. methods for achieving the liquid management standards at §6-1106(B);
    - f. methods to inspect loads and properly screen for potential contaminants in incoming feedstocks;
    - g. a description of the composting process and how that process will meet the standards established under § 6-1107(C);
    - h. fire prevention and control measures;
    - i. list of equipment to be used;
    - j. hours of operation;
    - k. access control;

- 1. product distribution; and,
- m. plan for metals concentrations as required in §6-1107(C) of this section and stability and maturity testing of the final compost product.

#### §6-1109 Compost Facility Reporting

- A. Recordkeeping requirements. The compost facility shall keep records for the following activities at the facility office available for review in a dry and secure location for five years. At a minimum, records on the following shall be retained:
  - 1. The temperature of the active compost windrows shall be monitored on a daily basis during the treatment process.
    - i. <u>For small compost facilities</u>, the temperature should be monitored at one foot and three foot depths every five linear feet of windrow at the base of the windrow while achieving the treatment standards established in §6-1107(D)(4) <u>for food residuals subsection</u> (j)(4) <u>of this section</u>
    - ii. <u>For medium and large compost facilities</u> the temperature of the active compost windrows shall be monitored on a daily basis during the treatment process in accordance with the requirements of the approved facility management plan.
  - 2. weekly amounts, recorded in either tons or cubic yards and types of incoming compost feedstock;
  - 3. annual amount of compost produced in cubic yards or tons;
  - 4. annual amount of contaminants disposed of; and,
  - 5. copies of all analytical results for metals and maturity testing of the final compost product as required by § 6-1107
- B. Data in the form of an annual report shall be <u>forwarded</u> provided to the Secretary by January 20 of each year, on forms provided by the Secretary.
- C. Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, and the selectpersons of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

# §6-1110 Compost Facility Closure

A. Closure. All compost facilities The facility must be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant must remove all compost, wastes, feedstocks, secondary materials, and residue, including compost screenings, from the facility; and broom clean the facility structures and equipment.

## **Subchapter 12 – Organic Drop-offs and Anaerobic Digesters**

#### §6-1201 Applicability

- A. Notwithstanding the other requirements of these rules, this Subchapter applies to persons engaged in organics management activities that do not constitute composting. The wastes being managed do not contain any amount of sewage sludge, domestic septage or septage. Activities where the wastes being managed do contain any amount of sewage sludge, domestic septage, or septage shall be managed as diffuse disposal facilities as provided for in Subchapter 13.
- B. The definitions of §6-1102, specific to organics management also apply to this Subchapter

## **§6-1202** Organics Management Facility Types

A. <u>Organic Drop-Off Facilities</u>. Facilities accepting only food residuals at a volume of less than 128 gallons per week. These facilities shall register with the Secretary

# B. Anaerobic Digesters

- 1. Digesters that accept any amount of organic solid waste for use as a feedstock.
  - i. Receiving slurried food residuals A digester which receives food residuals in a slurried condition which is immediately pumped into a reception tank then the Operator shall register with the Secretary pursuant to §6-505.
  - ii. Receiving unprocessed food residuals- If that feedstock is processed at the digester facility the Operator must obtain a certification pursuant to §6-503.
  - iii. An Anaerobic digester may accept a limited amount of organic solid waste, on a trial basis and not apply for a permit under this section. The trial shall not exceed 12 weeks 6 months in duration. The facility shall apply for and receive an insignificant waste management event approval for the activity under the requirements of § 6-504(B).

#### §6-1203 Organics Management Facility Siting

- A. Organic Drop-Off Facilities
  - 1. If the facility size, processes, activities, or the nature of the activities present a hazard to public health or the environment, or create a nuisance, the Secretary may require the closure of the facility.
- B. Anaerobic digester facilities not operating prior to the effective date of this rule shall meet the required general siting standards of Subchapter 7.

#### §6-1204 Organics Management Facility Design Standards

#### A. General Performance Standards

- 1. All Facilities shall be designed and operated to control vectors, and to control emissions or discharges to the environment, including odor and dust, so as to preclude the creation of nuisance conditions and undue threats to public health and safety or to the environment.
- 2. <u>All facilities shall be designed and operated to prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes.</u>
- 3. All facilities shall be designed to assure the effective collection, storage and/or processing of waste materials.

## B. Organic Drop-off Facilities

1. <u>Food residual material must be stored in leak proof containers with waterproof lids and must be covered, locked and secured when the drop-off is not staffed or open for drop-off activities.</u>

## C. Anaerobic Digestion Facilities

- 1. Facility design shall consider the following aspects of the site in the design of the facility in order to comply with general operational performance standards provided in Subchapter 7:
  - i. soils and surficial geology;
  - ii. topography; and
  - iii. surface water.
- 2. Facilities shall be designed to provide for all weather access, with access controlled and limited to hours of operation identified in the facility management plan.
- 5. All new facilities designed with tipping floors where municipal solid waste is temporarily deposited pending processing shall be designed and constructed so that the tipping floor is either enclosed within a building or covered by a roof to prevent exposure of waste to weather. The tipping floor shall incorporate a collection system designed to collect liquids that may be associated with incoming waste materials. Liquid storage tanks shall be double-walled, and shall be sized appropriately for the particular facility.
- 6. <u>Facilities shall be designed to have sufficient and appropriate storage for all materials and</u> feedstocks and any process residuals.

#### §6-1205 Organics Management Facility Operating Standards

## A. Organic Drop-Off Facilities

- 1. An organics drop-off facility shall be deemed to meet the requirements provided that the owner(s) and operator(s) prevents damage and pollution of water, air, soil, and other natural resources and the environment; and provided that the drop-off does not create a public nuisance or present a threat to public health or safety.
- 2. The facility shall comply with the following minimum requirements and standards:
  - i. No more than two (2) 64-gallon toters or equivalent volume of organics will be stored on site at any time.
  - ii. An adequate supply of wood shavings, sawdust, or other appropriate absorbent material shall be on hand to cover the food residuals to maintain control on vectors and odors.
  - iii. All food residuals stored at the facility shall be removed from the facility at least every seven (7) days or on a more frequent schedule as needed to preclude the creation of nuisance conditions.
  - iv. <u>In no case shall food residuals stored at the facility be allowed to create public nuisance conditions, such as, but not limited to, odors or vectors (insects, animals, birds etc).</u>

#### B. Anaerobic Digesters

- 1. The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- 2. <u>Animals showing signs of a neurological disease shall be reported to authorities and managed</u> in accordance with their directions.
- 3. Except as specifically provided in this subchapter section, all solid waste shall be stored in containers. The facility shall be managed to minimize the possibility of an emission or discharge of contaminants from the containers.
- 4. Digestate (liquid or solid) shall be managed in the following manner:
  - i. Solid portions of digestate must meet the treatment standards established in § 6-1110(D) by composting or other treatment options prior to distribution off-site for non-farm use, unless adequate pathogen inactivation can be demonstrated.
  - ii. <u>If the facility is located on a farm, digestate that meets standards for pathogen</u> treatment and contaminant content and concentration established by the Secretary or Secretary of Agriculture, Food, and Markets may be exempted from solid waste

disposal siting and certification requirements where collection and land application occurs under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management but is not authorized for use on crops for direct human consumption; or

- iii. If the facility is not located on a farm, collection and land application of leachate (the liquid portion of the digestate) must meet solid waste siting and certification criteria and occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 Nutrient Management or a plan approved by the Secretary with the following restrictions:
  - a. Application rate shall be based upon the character of the liquid digestate, but shall not to exceed 25,000 gallons per acre per day.
  - b. Liquid application shall not occur when the fields are saturated, frozen, snow covered, or when ponding occurs.

## §6-1206 Organics Management Facility Applications

## A. Organic Drop-Off Facilities

- 1. Registration. No person shall operate an organics drop-off without receiving prior approval from the local solid waste management entity be it a district, alliance, or approved town, then registering that facility with the Secretary on a registration and management plan form provided by the Secretary. At a minimum the registration shall contain the following:
  - i. The name and contact information for the drop-off registrant.
  - ii. The name, address, and location of the drop-off registered under this section.
  - iii. Estimated amount of organics including food residuals the drop-off will collect on a weekly basis and annual basis.
  - iv. Hours of operation.
  - v. How the drop-off will manage material, such as what types of containers will be used, how odors and vectors will be addressed, access control methods, and where the materials will be transported.
  - vi. A certification by the drop-off registrant that the drop-off will be operated in accordance with these rules.

#### B. Anaerobic Digesters

- 1. <u>Anaerobic digesters that receive organic solid waste in a slurried condition directly into a holding tank shall register that facility with the Secretary on a registration and management plan form provided by the Secretary.</u> At a minimum the registration shall contain the following:
  - i. The name and contact information for the applicant.
  - ii. The name, address, and location of the facility
  - iii. Estimated amount of organics including food residuals the facility will manage on a weekly and annual basis.
  - iv. Hours of feedstock delivery.
  - v. How the facility will manage incoming material, such as methods of delivery, and access control methods.
  - vi. A certification by the registrant that the facility will be operated in accordance with these rules.
- 2. On-farm and Off-farm anaerobic digesters that receive unprocessed organic solid waste and then process the organic solid waste on site shall apply for a full certification as an organics recovery facility (ORF) as provided for in Subchapter 9.
  - i. <u>Anaerobic digesters which process food residuals on site prior to digestion shall submit a</u> management plan for the proper reuse or disposal of the liquid and solid residual streams.
- 3. Off farm anaerobic digesters that process organic solid waste inputs on site shall apply for a full process certification and Permitting. Facilities permitted under this subsection shall meet the following permitting requirements of §6 503.:
  - i. the requirements of § 6-304(e)(10) financial responsibility
  - ii. the requirements of § 6-304(e)(11) closure plan;
  - iii. the requirements of § 6-304(e)(13) planning requirements of 10 V.S.A. § 6605(c);
  - iv. the requirements of § 6-304(e)(14) background disclosure requirements of 10 V.S.A. § 6615f 6605f;
  - v. submit a plan for effective public notice as required by § 6-304(h); and
  - vi. be subject to the application review requirements of §§ 6-305 and 307

#### §6-1207 Organics Management Facility Reporting

- A. Organic Drop-Off Facilities shall keep records for the following activities at the facility office in a dry and secure location available for review for three years. At a minimum, records on the following shall be retained:
  - 1. Annual data on the amount of organic materials accepted shall be kept and shall be tracked by type of materials and shall be reported to the Secretary by January 20 of each year, on forms provided by the Secretary.
  - 2. Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, and the selectpersons of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

## B. Anaerobic Digesters.

- 1. Recordkeeping requirements. The <del>compost</del> facility shall keep records for the following activities. At a minimum, records on the following shall be retained. A digester permitted under this section shall keep records at the facility office available for review in a dry and secure location for five years. Records shall be kept on the following:
  - i. documentation that digestion process meets pathogen inactivation standards if digestate is used off site or sold for public use;
  - ii. weekly amounts and types, of incoming feedstocks;
  - iii. annual amount of digestate produced and description of how digestate is managed.
- 2. Reporting requirements. An annual report shall be forwarded to the Secretary by January 20 of each year, on forms provided by the Secretary. The annual report shall include the following information:
  - i. annual amounts and types of incoming feedstocks; and
  - ii. annual amount of digestate produced and description of how digestate is managed.

#### §6-1208 Organic Management Facility Closure

A. Organic Drop-Off Facilities. The facility must be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant must remove all wastes, secondary materials, and residue, from the facility; and broom clean the facility

## structures and equipment.

- B. Anaerobic Digesters (all types) must be closed in a manner that:
  - 3. Minimizes the need for further maintenance related to the waste facility; and
  - 4. Controls, minimizes or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater or surface waters or the atmosphere.
  - 5. Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.
- I. Anaerobic digesters that process materials on site (full certification facilities) shall:
  - 1. <u>Have an The</u> approved closure plan <u>that</u> will become a condition of any certification or other operating authority issued by the Secretary. <u>The closure plan shall provide sufficient detail to allow a third party to implement and complete the closure tasks of the plan.</u>
    - i. An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
    - ii. An amended closure plan must be submitted for approval to the Secretary whenever:
      - 1. Changes in the operating plan or facility design affect the closure plan; or
      - 2. There is a change in the expected year of closure.
    - iii. When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment must be requested at the same time. If a certification modification is not needed to authorize the change in operating plans or facility design, the request for a closure plan amendment must be made within 60 days after the change in plans or design occurs.
  - 2. Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.
  - 3. Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:

- i. Certification by the certification holder of the facility and by a professional engineer licensed in the State of Vermont that the facility has been closed in accordance with the specifications of the approved closure plan; and
- ii. Verification that the owner of the property on which the facility is located has recorded a notation on the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a solid waste management facility.

#### **Subchapter 13 – Residuals Management Facilities**

## §6-1301 Residuals Management Facility Types

- A. <u>Sludge and Septage Storage and Transfer Facilities: These include, but are not limited to the following: Storage tanks, bunkers, stockpiles, storage lagoons, drying beds, holding tanks, installed infrastructure at wastewater treatment facilities used for septage disposal, and installed pads at wastewater treatment facilities used for mobile dewatering where there is piping back to headworks.</u>
- B. <u>Sludge and Septage Treatment Facility: These include, but are not limited to the following: ;ime stabilization vessels, dewatering equipment, drying beds, biosolids drying facilities, biosolids composting facilities and other facilities for the production of exceptional quality (EQ) biosolids.</u>
- C. <u>Land Application Facility: Agricultural or sivicultural sites used for the management of non-EQ biosolids or septage by application to the land as a nutrient source or soil conditioner. Also known as "diffuse disposal sites" or "land application sites".</u>

### §6-1302 Residuals Management Facility Exemptions

- A. Exemptions from Certification: Treatment or storage facilities for a sludge or septage that are located inside the fenced area of a domestic wastewater treatment plan permitted under 10 V.S.A. Chapter 47 are exempt from obtaining a certification provided that:
  - 1. the treatment facility does not utilize a process to further reduce pathogens in order for the waste to qualify for to produce EQ biosolids for distribution and marketing to the general public;
  - 2. the facility is not a sludge or septage drying bed, lagoon or non-concrete bunker; if a lagoon, it is a component of the wastewater treatment process permitted under 10 V.S.A. Chapter 47 and does not serve solely for the storage or treatment of sludge removed from the effluent stream; and
  - 3. a sludge and septage management plan for the facility, as specified in §6-1307(E), has been submitted to the Secretary and the Secretary has approved the plan.
- B. General Exemption: EQ biosolids or EQ biosolids products that are imported to into the State of Vermont solely in individual bags or containers having a net weight of fifty (50) pounds or less are exempt from these Rules.

#### §6-1303 Importation of EQ Biosolids

- A. EQ biosolids or EQ biosolids products imported into the State of Vermont shall:
  - 1. Meet the lower of:
    - i. The pollutant limits established in §6-1306(A)(13), or;
    - ii. The corresponding pollutant limits of the state in which they are generated; and
  - 2. If produced by a composting process, have cured for a minimum of thirty (30) days following active composting and cooled to ambient temperatures.

#### §6-1304 Residuals Management Facility Siting Standards

<u>In addition to the general siting requirements of Subchapter 7, the following facility specific siting requirements apply:</u>

- A. Sludge and Septage Storage and Transfer Facilities: Facilities in existence as of February 1, 1989 which are used for the <u>transfer</u>, storage and treatment of sludge and septage and located at <u>inside the fence of</u> a Wastewater Treatment Plant are exempt from the requirements of Subchater 7 and this section of these Rules.
- B. Treatment Facilities: Facilities in existence as of February 1, 1989 which are used for the storage and treatment of sludge and septage and located at a Wastewater Treatment Plant are exempt from the requirements of §6-703(B).
- C. Diffuse Disposal Land Application Facilities
  - 1. Prohibited from location within a zone 1 or 2 of an approved Public Water Supply Source Protection area.
  - 2. The Secretary may, on a case-by-case basis, make a determination that a diffuse disposal land application facility may be sited in zone 2 of an approved surface water Public Waste Supply Source Protection Area.

## §6-1305 Residuals Management Facility Design Standards

In addition to the general siting requirements of §6-704, the following facility specific design standards apply:

- A. Treatment Facilities: General
  - 1. Facilities shall be designed to provide adequate storage to assure the protection of public health and safety and the environment and to assure that the disposal of stored wastes occurs at proper times and under environmentally sound conditions.

- 2. Facilities shall be designed to prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes.
- 3. Facilities shall be designed to protect surface water, and groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to surface water, groundwater or the air.
- 4. Facility management plans shall include provisions for contingencies for the proper management of wastes during both planned and unplanned events when the facility is not in operation.
- 5. Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of waste receive organized instruction that teaches them to perform their duties in a way that ensure the <u>facility's facilities</u> compliance with these rules and conditions of certification.
- 6. Facility management plan must include estimates of amounts and types of solid wastes brought to storage facilities, and a schedule for transport and disposal of these materials.

### B. Treatment Facilities: Exceptional Quality (EQ) Biosolids Compost

- 1. To meet the requirements for distribution and/or marketing, any solid wastes derived or partially derived from a domestic waste to be eomposted considered EQ biosolids shall: must
  - i. undergo a process to further reduce pathogens as defined in 40 CFR Part 503.32(a)(3,4,7, or 8) Appendix B or other treatment processes deemed appropriate for other pathogen containing waste and:
  - ii. meet one of the vector attraction reduction standards established in 40 CFR Part 503.33 and;
  - iii. meet the contaminant standards established in §6-1306(M); and
  - iv. <u>EQ biosolids produced by composting processes shall be cured for a minimum of thirty</u> (30) days following the active composting process and may not be released from the facility until the composed EQ biosolids have cooled to ambient temperatures.
  - v. Design documentation must demonstrate the capability to meet this these standards.
- 2. The design shall provide adequate storage at the treatment facility for curing the EQ biosolids produced by composting processes compost, and for periods of time when the EQ biosolids are compost is not in demand.
- 3. Evidence of the ability to pass the prequalification test specified in § 6-1305 (A)(12) of these rules.

4. For <u>EQ biosolids</u> eompost derived or partially derived from a domestic waste a feasible marketing and <u>distribution</u> development plan discussing how, where, and under what conditions the EQ biosolids compost will be marketed or disposed of is required for certification.

# C. Diffuse Disposal Land Application Facilities

- 1. Facilities shall be designed to provide for an aggregate storage volume for five months of the waste generated to account for storage during winter months, inclement weather and normal agricultural and silvicultural practices. Alternatives which provide the equivalent of storage are acceptable if adequately documented.
- 2. Design documentation shall detail each disposal site with respect to soil character, cropping practices, usable area, floodplain and seasonal restrictions, application area and rates, and site life, as these affect the management of the facilities.
- 3. Land application rates shall be based on agronomic rates unless otherwise limited by the Secretary. Waste quality must be fully documented as required in §6-1306(L).
- 4. Design shall show obvious points of public access and provide for any appropriate measures to control public access.

## D. Waste Piles Intended for Land Application Diffuse Disposal

- 1. Waste pile storage areas <u>shall must</u> be of adequate volume to contain the waste in accordance with the generation, transport and disposal schedule contained in the facility management plan.
- 2. Waste piles shall be covered to prevent the generation of leachate. if the contents are subject to leaching to groundwater.
- 3. Waste piles located at diffuse disposal facilities are prohibited except for short term staging (less than two weeks) prior to an application event

# E. Lagoons

- 1. The liner composition shall be compatible with the solid waste to be stored in a lagoon.
- 2. Lagoons shall be designed to provide a minimum of two (2) feet of freeboard at all times.

#### §6-1306 Residuals Management Facility Operating Standards

In addition to the general operating requirements of §6-705, the following facility specific operational standards apply:

- A. Application of solid wastes <u>derived from domestic waste</u> on frozen ground or on top of snow-covered ground is prohibited.
- B. Application rates shall be determined on the basis of representative sampling and analysis of the wastes applied, the crop nutrient requirements, and other sources of nutrient used, and limited by other factors such as metals.
- C. Cadmium application shall be limited to 0.45 pounds per acre annually, and 4.5 pounds per acre cumulatively.
- D. The pH of the soil in the zone of incorporation for all sites used for application of solid wastes shall be maintained between 6.5 and 8.0 during the time of application, unless the pH of the waste is 11.0 or greater at the time that it is applied to the land.
- E. Application of solid waste is prohibited on the 100-year floodplain unless incorporated within 48 hours of application.
- F. Application of domestic waste within the floodway portion of the 100-year floodplain is prohibited.
- G. Application of solid waste is prohibited at times when groundwater is within three (3) feet of the <u>bottom</u> of the zone of incorporation.
- H. Application of solid waste is prohibited in Class I and Class II Groundwater areas.
- I. Application is prohibited in a watershed for a Class A stream or stream segment.
- J. Land Application. Prior to the land application of solid wastes derived from domestic waste, the waste must be treated, by lime stabilization, pyrolysis, or by other chemical, biological, or physical processes, to:
  - 1. meet the requirements of a process to significantly reduce or further reduce pathogens as included established in 40 CFR Part 503.32(a)(3, 4, 7 or 8); or 40 CFR Part 503.32(b) Appendix B; and to
  - 2. meet the vector attraction reduction requirements established in 40 CFR Part 503.33 and;
  - 3. assure that the final product is homogeneous and not otherwise deleterious in character.
- K. Where solid waste is a domestic waste unless otherwise directed by the Secretary, the following restrictions shall apply:
  - 1. Public access shall be controlled for the duration of disposal, and for twelve (12) months beyond after the last application of waste disposal episode.

- 2. Domestic food source animals shall be prohibited from grazing on disposal facilities for the duration of the project and six (6) months after the last application of waste beyond the last disposal episode.
- 3. Sites amended by solid waste application shall not be used for the production of crops for direct human consumption, <u>is prohibited for the duration of the project and 36–38 months after beyond the last application of waste disposal episode.</u>
- 4. Feed crops grown on solid waste amended disposal facilities shall not be harvested for a period of five (5) weeks beyond after the last application of waste disposal episode.
- 5. Silage to be used as a feed crop, from solid waste amended sites shall not be fed to domestic food source animals for a period of four (4) months after the last application of waste.
- 6. Turf grown shall not be harvested for a period of one (1) year after the last application of waste.
- L. The following requirements for sampling, analysis, and standards shall be met:
  - 1. All solid wastes intended for <u>land application or marketing and distribution as an EQ product</u> diffuse disposal shall be sampled and analyzed for the following parameters. The frequency will be established in each certification.
    - a. The waste must pass the Extraction Procedure (EP) Toxicity Test Method (or other EPA approved extraction procedure). This can be done one of two ways; through sampling and analysis or calculation.
      - aa. Sampling and Analysis. Perform the EP Toxicity Test Method on the sample; or
      - ab. Calculation. For a superior quality waste material it may be possible to show mathematically that the waste cannot fail the extraction procedure. If this method is chosen, the calculations must be based on an assumption that all metals are extracted from the sample.
  - 2. The waste must be tested for total metals concentration for the following metals:

Cadmium (Cd)

Chromium (Cr)

Copper (Cu)

Nickel (Ni)

Lead (Pb)

Zinc (Zn)

Mercury (Hg)

Molybdenum (Mo)

Selenium (Se)

#### Arsenic (As

Note that Arsenic (As), Silver (Ag), Barium (Ba), and Selenium (Se) must be analyzed if the calculation method, subsection (A)(11)(i)(a)(ab) of this section is chosen.

- 3. The waste must be tested for total polychlorinated biphenyls (PCB).
- 4. The waste shall be tested for the following nutrients, if land application is the chosen disposal method:
  - i. Percent solids; pH; Total Kjeldahl Nitrogen (TKN); Ammonia-Nitrogen (NH<sub>4</sub>-N); Nitrate-Nitrogen (NO<sub>3</sub>-N); Total Phosphorous (TP); and Total Potassium (TK); and water extractable phosphorous (WEP).
- M. All wastes intended for <u>land</u> application <u>diffuse disposal</u>, or for processing at <u>a composting or co-composting facility or a facility preparing EQ biosolids</u>, <u>must</u> shall meet the following standards. At the Secretary's discretion, these standards may be made more or less stringent.
  - 1. EP Toxicity Test Method limits (or other EPA approved extraction procedure), or demonstrate mathematically that based on the total metals concentrations in the waste, it will not fail EP Toxicity Test Method limits.
  - 2. Total metals concentrations of the wastes must be no more than:

PARAMETER	MAX-CONCENTRATION (mg/kg, dry wt.)
Arsenic (As)	15
Cadmium (Cd)	21
Chromium (Cr)	1,200
Copper (Cu)	1,500
Lead (Pb)	300
Mercury (Hg)	10
Molybdenum (Mo)	75
Nickel (Ni)	420
Selenium (Se)	100
Zinc (Zn)	2,800

- 3. Total PCB = 10 mg/kg or less, dry weight.
- 4. Pathogen reduction standards, as follow:
  - Compost. To be considered compost, and eligible for disposal by general distribution, the
    waste must shall undergo a process to further significantly reduce pathogens as defined in
    40 CRF Part 503.32(b) or a process to further reduce pathogens as defined in
    40 CRF
    Part 503.32(a)(2,3,4,7, or 8) Appendix B. This subsection (A)(12)(iv) applies only to
    compost EQ biosolids derived or partially derived from domestic waste.

- ii. Diffuse disposal by land application. Prior to land application of solid waste derived from domestic waste, the waste must undergo a process to significantly reduce pathogens or a process to further reduce pathogens, as defined in Appendix B.
- iii. A certification may be issued to a person who does not meet the standards contained in subsection (A)(12)(ii), provided that the certification contains a compliance schedule with the following approved by the Secretary:
  - a. a management plan that is designed to achieve compliance with the applicable standards with a reasonable period of time;
  - b. the waste intended for diffuse disposal, as managed, does not present an unreasonable risk to human health or the environment; and:
  - c. the holder of the certification notifies all users and property owners where the waste is applied of the nature and extent of noncompliance with the applicable standards.
- N. Testing frequency of solid waste, soil, groundwater, and surface water and plant tissue shall be performed as specified in the solid waste management facility certification.
- O. For empost For EQ biosolids derived or partially derived from a domestic waste, only those marketing and distribution methods authorized in the solid waste management facility certification are allowed.
- P. Only domestic septage may be managed by application to the land. The disposal of commercial septage, portable toilet waste, holding tank waste, cesspool waste and waste from Type III marine sanitation devices by application to the land is specifically prohibited.

# §6-1307 Residuals Management Facility Applications

In addition to the general application requirements of Subchapter 5, the following facility specific requirements apply:

- A. <u>Either approved Sludge Management Plans or Solid Waste Management Certifications are required for all domestic wastewater treatment plants that generate biosolids.</u>
- B. Solid Waste Management Certifications are required for the land application sites where either septage or non-EQ biosolids are managed.
- C. <u>Solid Waste Management Certifications are required for all sludge and septage storage, treatment or transfer facilities located outside the fenced area of a wastewater treatment facility.</u>
- D. Solid Waste Management Certifications are required for facilities that prepare EQ biosolids.

## E. Sludge Management Plans shall include the following

- : All owners of wastewater treatment plants that generate sludge as a results of the treatment of any domestic waste shall submit sludge management plans to the Secretary for review and approval <u>in all cases where a Solid Waste Management Certification is not required by these</u> Rules. The plans shall:
  - i. identify the owners and operators of the plants and their contact information;
  - ii. and shall include a contingency plan, a spill response plan and a reporting plan;
  - iii. include a schematic diagram of the facility;
  - iv. <u>present</u> information demonstrating conformance with an approved Solid Waste Implementation plan; and
  - v. present information regarding methods of sampling and disposal.

#### §6-1308 Residuals Management Facility Reporting

<u>In addition to the general reporting requirements of Subchapter 7, the following facility specific requirements apply:</u>

- A. Treatment Facility: All owners of wastewater treatment plants that generate sludge as a results of the treatment of domestic waste, all owners of companies that manage septage, and all commercial haulers of sludge or septage subject to the permit requirements of 10 V.S.A. 6607(a) shall report to the Secretary on a quarterly basis on forms provided by the Secretary. Reports are due on the 15<sup>th</sup> day of the month following the end of each calendar quarter (January 15, April 15, July 15 and October 15). The reports shall include:
  - 1. the quantity of sludge disposed; removed
  - 2. the location where the sludge was delivered for management or disposal; and
  - 3. sludge quality and other facility monitoring data, when required; and
  - 4. where required for septage managers, the fee authorized under 3 V.S.A §2822(j)(33) for septage management shall be submitted with each quarterly report for the corresponding quarter's septage management activities.
  - 5. the location where the sludge was delivered for management or disposal
- B. Commercial haulers subject to the permit requirements of 10 V.S.A. 6607a as a result of hauling septage or sludge, must report to the Secretary in accordance with the following schedule:

- 1. Annually (by April 30 of each year) for the coming year, submit letter of intent from all facilities with conditions; and
- 2. Quarterly record of the facilities and quantities of septage or sludge delivered.

# §6-1309 Residuals Management Facility Closure

- A. A closure plan is required for all facilities except:
  - 1. Land used for the diffuse land application of septage, sludge or other appropriate wastes, as determined appropriate by the Secretary; and
  - 2. Septage or sludge facilities located at domestic wastewater treatment plants.
- B. At the Secretary's discretion, a financial instrument sufficient to cover the anticipated costs of a closure plan may be required. Such financial instruments shall be in conformance with Subchapter 8 of these Rules.

## **Subchapter 14 – Regulated Medical Waste**

#### §6-1401 Applicability

- A. All health care facilities, home healthcare professionals, transporters, transfer facilities, treatment facilities, public properties hosting events, mobile units, or private residences subject to the requirements of this section. This section applies to three major categories of regulated medical waste (RMW) generators:
  - a. large generator,
  - b. small generator, and
  - c. home generator.
- B. A portion of the waste generated in healthcare facilities or in the custody of a home healthcare professional meets the requirements of the RMW if the waste is listed in the definition of RMW under § 6-1402 (T).

## §6-1402 RMW Specific Definitions and Acronyms

- A. "Animal <u>Infectious</u> Waste" means animal carcasses, body parts, bedding, and other items from animals that the Department of Health or the Agency of Agriculture, Foods and Markets knows or suspects are contaminated with organisms that can produce disease in humans and concludes that disposal by burial or other ordinarily acceptable means of disposing of the waste would not sufficiently reduce the risk of transmission of a disease to humans or other animals.
- B. "Biosafety Level" means the combination of laboratory practice and techniques, safety equipment, and facility design and construction appropriate to the infectious agent handled as defined by the Centers for Disease Control and Prevention (CDC) publication *Biosafety in Microbiological and Biomedical Laboratories*, 5th Edition, December 2009 or as may be amended.
- C. "Biotechnological By-product Effluents" means any discarded preparation made from genetically altered living organisms (excluding plants) and their products.
- D. "Blood Products or Body Fluids" see "Human Blood, Blood Products and Other Body Fluids"
- E. "Certification of Treatment" means a document issued and signed by the treatment facility operator or duly authorized person, certifying that RMW was treated in accordance with the approved procedures for the method used. A sample Certification of Treatment form is included in Appendix A.
- F. "Challenge Testing" means a method used to verify the effectiveness of a specific RMW treatment device using biological and thermal indicators during standard operating conditions performed within 40

# hours of operation or once a week.

- G. "Chemotherapy Waste" means any non-hazardous material containing cytotoxic/ antineoplastic agents (agents toxic to cells) and/or antineoplastic agents (agents that inhibit or prevent the growth and spread of tumors or malignant cells) during the preparation, handling or administration of such agents. This waste includes, but is not limited to, masks, gloves, gowns, empty intravenous (IV) tubing bags and vials, and other contaminated materials.
- H. "Cultures and Stocks of Infectious Agents" means cultures and stocks of infectious agents including cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research, industrial and educational laboratories; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.
- I. "Disinfection" means reduction in the level of microbial contamination.
- J. "General Medical Waste" means any waste generated that, once contaminated, does not meet the Human Blood, Blood Products and Other Body Fluids definition. This includes bandages and dressings.
- K. "Health Care Facilities" means hospitals, clinics, physician's offices, dental practices, blood banks, veterinary hospitals, veterinary clinics, medical research facilities, and laboratories. Mobile medical units, such as mobile clinics and emergency response vehicles, and temporary treatment clinics are included in this definition. Long-term care, hospice, and school nurse/health room are included in this definition when the waste being generated from a product that is no longer self-administered.
- L. "Home Generator" means any wastes generated from the use of medications, testing supplies, injectable medications, and waste saturated by bodily fluids generated in the private single- or multi-family residence. These wastes are originally purchased and administered by the resident. Many of these wastes would be considered RMW if generated in a health care facility. Any waste generated by home healthcare professionals or trauma scene waste is RMW and excluded from this definition.
- M. "Human Blood, Blood Products and Other Body Fluids" means generated in either patient care, testing and laboratory analysis or the development of pharmaceuticals, including but not limited to:
  - 1. All liquid waste human blood and blood products such as serum plasma and other blood components;
  - 2. Other potentially infectious liquid body fluids including cerebrospinal fluid, synovial, pleural, peritoneal and amniotic fluid; not including nasal secretions, sputum, tears, sweat, urine, and vomitus unless they contain visible blood; and
  - 3. Items saturated or dripping with blood <u>if compressed</u> or with potentially infectious body fluids and those caked with dried blood or with potentially infectious dried body fluids.
- N. "Inaccessible" refers to used sharps that have been treated to the Treatment Standard and are placed into a sealed container with an immobilizing and plaster like medium so that they are no longer usable.

Upon visual inspection the waste cannot be identified. It does not mean compaction or shredding without treatment.

- O. "Infectious Agent" means a pathogen in sufficient virulence and quantity so that exposure to it by a susceptible host could result in an infectious disease.
- P. "Infectious Isolation Waste" means biological waste and discarded materials contaminated with blood, body fluids, excretion, exudates or secretions from humans who are isolated to protect others from dangerous communicable diseases.
- Q. "Needleless System" means a device that does not use needles for: (1) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) the administration of medication or fluids; or (3) any other procedure involving the potential for occupational exposure to blood-borne pathogens due to percutaneous injuries from contaminated sharps. This includes Sharps with Engineered Sharps Protection. Components of needleless systems may be disposed of in the regular trash unless infectious agents have potential of being present.
- R. "Pathological Waste" means human tissues, organs, and body parts that are removed during surgery, autopsy, obstetrical, or other medical or diagnostic procedures.
- S. "Pharmaceutical" means any chemical or biological product that is intended for use in the diagnosis, cure, mitigation, care, treatment, or prevention of disease or injury of a human or other animal; or any chemical or biological product that is intended to affect the structure or function of the body of a human or other animal. This includes, but is not limited to: dietary supplements, prescription drugs, over-the-counter drugs, residues of pharmaceuticals remaining in containers, personal protective equipment contaminated with pharmaceuticals, and clean-up material from spills of pharmaceuticals. Pharmaceuticals and used containers are covered under the Hazardous Waste program.
- T. "Regulated Medical Waste" (RMW) means that portion of waste generated in health care facilities or in the custody of a home healthcare professional which requires special handling and treatment prior to disposal.

1.Pathological waste;
2.Human blood, blood products and other body fluids;
3.Cultures and stocks of infectious agents;
4.Sharps;

1. The following types of solid waste are considered RMW:

5. Animal waste;

- 6.Chemotherapy waste;
- 7.Infectious isolation waste;
- 8.Biotechnological by-product effluents; and
- 9. Other wastes not included above as determined by the Secretary.
- 2. Exclusions. The following types of solid wastes are not considered RMW:
  - 1. Waste that has been identified or characterized as hazardous waste based on the compounds listed in the *Vermont Hazardous Waste Management Regulations* (HWMR) Appendix 3, U or P (Acute) list [40 CFR 261.33, *Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof*] and is the sole active ingredient of the mixed formulation. The formulation may be hazardous if it exhibits any of the characteristics as described in §7-205, *Characteristic of Ignitability*, §7-206, *Characteristic of Corrosivity*, §7-207, *Characteristic of Reactivity*, and §7-208, *Characteristic of Toxicity*, as presented in the Vermont HWMR;
  - 2. Corpses, remains and anatomical parts that are for ceremonial interment or ceremonial cremation:
  - 3. Nasal secretions, sputum, tears, sweat, urine, and vomitus unless they contain visible blood;
  - 4. Teeth;
  - 5.RMW generated in the home that has not been administered by a visiting health care service (see Home Generator definition); and
  - 6. Police evidence, other than sharps, that is held for more than one year in sealed packages.
- U. "RMW Generator" means any person, by site, whose act or process produces RMW or whose act first causes RMW to become subject to regulation. This includes any person who imports RMW from a foreign country.
  - 1. Large Quantity RMW Generator: generator that generates <del>more than</del> 50 pounds or more of RMW within a month.
  - 2. Small Quantity RMW Generator: generator that generates less than 50 pounds of RMW within a month.
  - 3. Exclusion: any person that meets the definition of Home Generator.

- V. "RMW Transfer Facility" means a <u>certified</u> solid waste management facility where RMW is collected, aggregated, sorted, stored, and/or processed for the purpose of subsequent transfer to a RMW treatment facility for treatment. A RMW Transfer Facility does not include facilities of medical waste generators employed for the purpose of consolidation or on-site treatment facilities.
- W. "RMW Treatment Facility" means a <u>certified</u> facility that accepts, stores, and treats RMW. It includes mobile treatment units. Healthcare facilities that receive RMW from off-site generators that receive a fee or payment above the cost for this service may be operating as a commercial RMW treatment facility. In addition, healthcare facilities that import RMW that exceeds the storage and treatment capacity of the host facility, or accepts RMW from generators located outside of the host facility's <u>geographic location</u> <u>network of medical offices and clinics</u> may be operating as a commercial RMW treatment facility.
- X. "Sanitization" means the process of making something free from elements, such as filth or pathogens, that endanger health as by cleaning or disinfecting by cleansing something so as to destroy or prevent growth of disease-carrying micro-organisms.
- Y. "Sharps" means objects that are capable of cutting or penetrating the skin and inducing subdermal inoculation of an infectious agent. This includes needles, Pasteur pipettes, scalpel blades and other items derived from human and animal patient care, blood banks, laboratories, mortuaries and research facilities. Discarded unused sharps removed from the original packaging are also considered RMW.
- Z. "STAATT Report" means a report produced by the *State and Territorial Association on Alternative Treatment Technologies*, entitled *Technical Assistance Manual: State Regulatory Oversight of Medical Waste Treatment Technologies*, dated April 1994-December 1998, or as may be amended.
- AA. "Sterilization" means the complete elimination or destruction of all forms of microbial life, including highly resistant bacterial endospores.
- BB. "Treated Regulated Medical Waste" means RMW that has been treated to the Treatment Standard or as otherwise specified, to substantially reduce, or eliminate its potential for causing disease.
- CC. "Treatment Standard for Regulated Medical Waste" means the inactivation of vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites, and mycobacteria at a 6-Log reduction or greater; and inactivation of B. stearothermophilus spores or B. subtilis spores at a 4-Log reduction or greater.

# DD. Acronyms

CDC Centers for Disease Control and Prevention

CFR Code of Federal Regulations HDPE High Density Polyethylene

HWMR Hazardous Waste Management Regulations

IV Intravenous

PVC Polyvinyl Chloride

STAATT State and Territorial Association on Alternate Treatment Technologies

#### §6-1403 RMW Management

- A. The following wastes are regulated medical waste and are subject to proper management under these rules: pathological waste, blood products, infectious agents, sharps, animal waste, chemotherapy waste, infectious isolation waste, and biotechnological by-product effluents.
- B. A Waste Minimization and Pollution Prevention Assessment is required and shall be stored at the facility for staff and Agency review: The assessment reviews the types and amounts of RMW generated at a facility. It also recommends waste minimization and pollution prevention strategies for eliminating or reducing the amount or toxicity of these wastes. The Assessment describes, to the extent applicable to the facility, the items listed below:
  - 1. The name of the individual(s) responsible for the management of RMW.
  - 2. RMW composition analysis, identifying types, and amounts of RMW generated.
  - 3. Waste streams of particular concern such as mercury and polyvinyl chloride plastics.
  - 4. <u>Current method(s) for management of RMW:</u>
    - i. use of on-site or off-site sterilize through autoclave;
    - ii. use of on-site or off-site incineration; and
    - iii. use of sanitary landfills, crematories or other disposal sites.
  - 5. The feasibility of substituting non-toxic or less toxic materials for products containing toxic materials.
  - 6. The feasibility of substituting needleless systems and Sharps with Engineered Sharps Injury Protection for sharps used.
  - 7. <u>Purchasing strategies and opportunities to eliminate or reduce packaging waste, product toxicity, risk of injury from sharps, and the consumption of non-renewable resources.</u>
  - 8. Set and implement goals for waste minimization and pollution prevention.
  - 9. Set and implement internal waste management policies.
  - 10. Educate and train employees to comply with waste management policies and goals.

#### §6-1404 RMW Handling, Treatment, and Disposal

A. Any person who generates, treats, transports, transfers, or disposes of RMW must comply with the applicable section as identified in the following table:

Entity	Applicable Portions of this Subsection
Large Generator	Packaging: (B)
	Storage: (C)(1) ii to vii
Small Generator	Packaging: (B)
	Storage (C)(1) ii to vi
	Treatment: (D) 3 to 6
Generator who treat solely their own	Packaging: (B)
<u>waste</u>	Storage: (C)(1)
	<u>Treatment:</u> (D)(1) ii, (2), (3) and (7)
	Also §6-1405
<u>Transporters</u>	<u>Transport: (E)</u>
Treatment facility	Storage: (C)(1)
	Treatment: (D)(1), (2), (3) and (7)
	Also §6-1407
Transfer Facility	Storage: (C)(1)
	<u>Also §6-1406</u>
Landfill Disposal Facility	Disposal: (F)

# B. RMW Packaging Requirements:

- 1. Generators must comply with all U.S. Department of Transportation packaging regulations, 49 CFR 173.197.
- 2. All containers must be labeled with the name and address of the generator.
- 3. Containers shall not be leaking when shipped.
- 4. Used sharps must be in separate containers from other RMW.
- 5. Roll-off containers, or similar bulk containers, are not permitted for transport of untreated RMW.

#### C. RMW Storage Requirements:

- 1. Persons who store RMW must comply with the following requirements:
  - i. Waste received at a treatment or transfer facility must be date stamped upon receipt at the facility.
  - ii. Waste must be stored in a manner and location that maintains the integrity of the packaging and prevents contact with water, precipitation, wind, and animals.
  - iii. Storage areas dedicated to RMW must be locked to prevent unauthorized access.

- iv. Access to on-site storage areas must be limited to authorized personnel.
- v. Areas used for the storage of RMW must be labeled to identify a "Universal Biohazard".
- vi. Treated and non-treated RMW must be maintained such that there are no offsite odors.
- vii. <u>Time limits for storage of untreated RMW, not including sharps, at a generator, transfer facility, or treatment facility may not exceed:</u>

Storage Conditions	From Date of receipt
Room Temperature	up to 3 days
Refrigerated at < 40 F	up to 7 days
Frozen at $< 0 \text{ F}$	up to 37 days

#### D. <u>RMW Treatment Requirements</u>

- 1. Persons that treat RMW must meet the following criteria:
  - i. Waste received at a treatment facility must be date stamped upon receipt at the facility.
  - ii. RMW must be treated to the Treatment Standard by the following methods prior to disposal:
    - a. pathological waste shall be incinerated at either a certified RMW treatment facility or at a crematorium; and
    - b. <u>all other RMW shall be autoclaved; or treated by an alternative treatment</u> management method in accordance with an agreement for the proper disposal of the treated RMW at a certified disposal facility which has been approved by the <u>Secretary.</u>
    - c. Exceptions:
      - aa. <u>cultures and stocks must be treated in accordance with the CDC Biosafety in Microbiological and Biomedical Laboratories</u>, December 2009, or as amended;
      - ab. blood and liquid wastes may be treated in a municipal wastewater treatment facility with the municipality's approval, or as other RMW in §6-1404(D)(1)(ii)(b) above;

- ac. <u>unused sharps in original packaging do not require treatment but may be disposed of as treated RMW</u>. Once unused sharps are removed from the original packaging, they should be considered RMW; and,
- ad. <u>all non-hazardous chemotherapy waste shall be incinerated or chemically</u> neutralized.
- d. <u>Treatment effectiveness must be demonstrated by one of the following methods:</u>
  - aa. challenge testing and continuous monitoring; or
  - ab. other method with prior approval by the Secretary.
- A Certification of Treatment, or a written alternative treatment management method approval, must accompany all treated waste offered for disposal and must provide the following information:
  - i. date treated;
  - ii. name and address of treatment facility;
  - iii.contact person;
  - iv. method of treatment;
  - v. <u>signature of operator or duly authorized person</u>, <u>certifying waste was treated to meet the</u> Treatment Standard; and
  - vi. method used to render waste inaccessible, if applicable.
- 3. Used sharps should be placed in a container specially made for sharps with a secure top.
- 4. For containers that come specially with an immobilizing agent, follow the instructions to add the agent, wait the prescribed time to activate, then dispose of in the regular household trash.
  - i. If container does not come with an immobilizing agent:
    - a. Put sharps in the container, needle end down.
    - b. Once the container is close to being full, mix and pour a type of plaster, such as Plaster of Paris, into the container.
    - c. The container should be closed securely with the screw cap and use strong tape, like duct tape, all the edges to prevent containers from opening.

- ii. The container may be placed in the regular household trash with the label "DO NOT RECYCLE, USED SHARPS" on the container. If the container is a "red box", cover the existing labels and add a label "USED SHARPS" to ensure the receiving facility understands what it contains.
- 5. <u>All general medical waste should be placed in a separate container and disposed of in the regular</u> household trash.
- 6. Potentially infectious bodily fluids should be contained with an absorbent material prior to disposal in the regular household trash.
- 7. Alternative Treatment Management Method Approval: All alternative treatment management methods must meet the Treatment Standard using the Process for the *Approval of Medical Waste Treatment Technologies* in Section 3.2 of the *Technical Assistance Manual: State Regulatory Oversight of Medical Waste Treatment Technologies* by the STAATT, and be approved by the Secretary.

#### E. RMW Transport Requirements

- 1. <u>Transporters of RMW must have a solid waste transporter permit under the provisions of 10 V.S.A. §6607(a).</u>
- 2. Transporters must ensure compliance with the packaging requirements in § 6-1404 (B).
- 3. <u>Transporters of treated RMW must have a Certificate of Treatment or a written alternative treatment management method approval in the vehicle during transportation.</u>
- 4. Transporters shall not accept boxes which show evidence of leaking.
- 5. <u>Transporters must complete delivery from a generator to a transfer facility, treatment facility or disposal facility within 24-hours or the next business day.</u>

#### F. RMW Disposal Requirements

- 1. Once RMW has been treated to the Treatment Standard, the treated RMW may be disposed of at a certified solid waste landfill disposal facility in accordance with the requirements set forth in §6-1404.
- 2. Treated sharps rendered inaccessible may be mixed in with municipal solid waste.
  - i. A Certification of Treatment or a written alternative treatment management method approval must accompany all treated waste offered for disposal.

ii. <u>Certification of Treatment shall be maintained by all in-state landfills for a period of one year.</u>

# §6-1405 RMW Generators with On-site Treatment and/or Serving as Consolidation Points

#### A. Applicability Requirements:

- 1. Large quantity generators, except for facilities working with infectious agents at biosafety levels 3 or 4, may treat RMW on-site of the facility if the approved treatment equipment is available and the facility has been approved to treat RMW.
- 2. All facilities that are working with infectious agents at biosafety levels 3 or 4 must obtain a permit to treat RMW on-site.
- 3. The facility is required to have a RMW operational plan submitted for review and approval. The type of sanitization treatment methodology, such as autoclaving, will be explained in detail in the RMW operational plan.

### B. Storage Requirements:

1. <u>Bags Suitable for Autoclave: The type of bag used to collect and store the waste prior to treatment will need to be specially designed bags which are available to be used in autoclaving RMW. These bags not only remain intact, but also enhance the sterilization process by allowing easier passage of steam into the waste. Facilities which utilize autoclaves to treat RMW shall use suitable red bags, autoclave approved, with the appropriate language imprinted on them.</u>

NOTE: The typical red, biohazard bag currently employed in the collection of RMW is not designed to withstand the high temperature and pressure conditions created in an autoclave.

# C. Reporting and Documentation:

- i. The facility will have a written agreement with the small quantity generators on file.
- ii. The facility will notify the Solid Waste Program when the agreement is finalized and will track all incoming waste.
- iii. The small quantity generators that are participating in the large quantity generator onsite treatment and consolidation will be subject to all packaging, labeling, transporting, and recordkeeping requirements.

#### §6-1406 RMW Transfer Facility Certification

A. <u>Application Requirements: The application for a RMW transfer facility or facility component must</u> address Subchapters 3 and 5 to 9. Additional information required by the Solid Waste Program in an

# Application for a RMW transfer facility must include:

- 1. Facility Management Plan which includes, at a minimum, the following information:
  - i. <u>listing of the sources and quantities of RMW anticipated;</u>
  - ii. detailed description of the facility operations including:
    - aa. unloading, weighing, monitoring, handling and storing practices; and
    - ab. methods to control contaminants potentially released into the air, soil or water.
  - iii.plan for the separation and proper management of hazardous waste;
  - iv. agreement with a treatment facility to accept the RMW;
  - v. schedule for transfer of the RMW to a treatment facility adjusted as necessary to minimize odors from the waste;
  - vi. plan for detecting and managing radioactive wastes;
  - vii. plan for educating generators and haulers regarding the type of RMW that is acceptable for storage and transfer at the facility;
  - viii. <u>engineering plans and specifications including: site plans showing the property boundaries, facility building dimensions, and waste storage area(s); and</u>
  - ix. other information deemed necessary by the Secretary to adequately review the application and protect public health and safety and the environment.

#### §6-1407 RMW Treatment Facility Certification

- A. Application Requirements: The application for a RMW treatment facility must address Subchapters 3 and 5 to 9. Additional information required by the Solid Waste Program in an Application for a RMW treatment facility must include:
  - 1. Facility Management Plan which includes, at a minimum, the following information:
    - i. listing of all treatment component(s) including:
      - a. <u>detailed description of how each component operates;</u>
      - b. demonstration that the RMW, when treated, meets the Treatment Standard; and

- c. <u>appropriate operating parameters for the process, such as residence time, temperature, pressure, irradiation levels, and chemical concentrations.</u>
- ii. <u>listing of the sources and quantities of RMW anticipated;</u>
- iii. detailed description of the facility operations including:
  - a. process flow diagram showing all aspects of RMW waste handling from receiving through offering for disposal including, but not limited to, unloading, weighing, monitoring, storing and treatment;
  - b. start-up and, shut-down procedures;
  - c. <u>disinfection processes for reusable containers</u>;
  - d. facility hours of operation; and
  - e. methods to control the release of contaminants into the air, soil or water.
  - f. <u>description of the utility requirements including:</u>
    - a. estimates of the quantity of water used for cooling, including that which may be recycled; and
    - b. characterization and estimates of the treatment facility's wastewater production including the process water to be treated as hazardous waste or intended to be discharged from the treatment facility.
  - g. <u>list and description of all permits required including any required for air and water discharges;</u>
  - h. <u>description of the hauling process into and out of the facility;</u>
  - i. plan for the separation and proper management of hazardous waste;
  - j. plan for detecting and managing radioactive wastes;
  - k. plan for educating generators, venders and haulers regarding the type of RMW that is acceptable for treatment at the facility;
- iv. engineering plans and specifications including:
  - a. site plans showing the property boundaries, facility building dimensions, site topography, utilities, treatment unit(s) and layout;

- b. piping diagrams and connection details;
- c. cross-section views of the facility; and
- d. additional specifications for all equipment instrumentation and control centers;
- v. description of the challenge testing program;
- vi. monitoring and maintenance plan for all treatment, pollution control and detection equipment;
- vii. agreement for the proper disposal of the treated RMW at a certified disposal facility; and
- viii. any other information deemed necessary by the Secretary to adequately review the application.
- 13. <u>RMW is accompanied by a certification of treatment or written alternative treatment management method approval, may be disposed of at a certified municipal solid waste landfill disposal facility.</u>

#### §6-1408 Home Generator Handling and Proper Disposal

- A. Proper handling and disposal methods for these wastes are critical to minimize risks to public health and safety and to the environment. Guidance provided from *How to Discard Syringes and Other Sharps* by the Vermont Department of Health.
- B. Applicability Requirements:
  - 1. <u>Any wastes generated from the use of pharmaceuticals, testing supplies, injectable medications,</u> and waste saturated by bodily fluids generated in the private residence.
  - 2. These wastes are generated from products that are originally acquired and self-administered by the resident. Many of these wastes would be considered RMW if generated in a health care facility.
  - 3. Any waste generated by home healthcare professionals or trauma scene waste is RMW and excluded from this definition.

#### C. Handling Requirements

# 1. <u>Used Sharps:</u>

- i. Wear heavy-duty gloves;
- ii. Use a tool like tongs or pliers, not bare hands, to pick up the sharp;
- iii. Leave the needle of the syringe intact; and
- iv. Place syringe, needle end down, into an acceptable container as described below.

# D. <u>Disposal Requirements</u>

- 1. <u>Unused Medications: Using the Vermont Drug Diversion Unit list of locations, drop off all unused medications to a secured location for proper disposal.</u>
- 2. <u>Used Sharps Mail Back Program: Contact an approved U.S. Postal Service or courier delivery company to receive a disposal system that, when nearly full of medical waste, can be shipped back to the company for proper disposal. This company will provide the service of an approved container, pre-paid shipping box, pre-addressed labels, and any necessary disposal documentation.</u>
- 3. <u>Used sharps mixed with solid waste:</u>
  - i. Place in a hard plastic, opaque container, such as a laundry detergent or bleach bottle with a screw top. Look for the mark #2 HDPE (type of plastic known as high density polyethylene) on the bottom of the container to make sure the plastic container is strong enough. A container specially made for sharps commonly known as a red box may also be used.
    - NOTE: Soda and water bottles are not strong enough to prevent puncture.
  - ii. Once the container is close to being full, mix and pour a type of plaster, such as Plaster of Paris, into the container.
  - iii. The container should be closed securely with the screw cap and use strong tape, like duct tape, all the edges to prevent containers from opening.
  - iv. The container may be placed in the regular household trash with the label "DO NOT RECYCLE" on the container.
  - v. <u>If the container is a red box, cover the existing labels and add a label "USED SHARPS"</u> to ensure the receiving facility understands what it contains.
- 4. Potentially infectious bodily fluids: Contain the fluids by adding absorbent materials with the fluids in a container prior to disposal to prevent leaking from the bag.

5. All general medical waste to include bandages, dressings, etc., which are saturated by bodily fluids: Place in a separate container from the used sharps and dispose of in the regular household trash. Contain the fluids by adding absorbent materials with the fluids in a container prior to disposal to prevent leaking from the bag.

#### **Subchapter 15 – Special Topics**

#### **§6-1501** General

- A. The Secretary may designate that certain types or categories of solid wastes are special solid wastes if he or she determines that the waste pose special environmental or public health and safety concerns, or have other characteristics (e.g. size, composition) that cause problems in handling or management.
- B. Subsequent to a special waste designation, the Secretary may require, as part of a certification or other operating authority, any special handling or management techniques for the wastes involved as may be necessary to assure the protection of public health and safety and the environment.

# §6-1502 Approval for Acceptable Uses of Solid Waste

- A. Any person may request approval for an acceptable use of a particular solid waste which would otherwise be disposed. Acceptable use determination does not apply to:
  - 1. Activities which require a solid waste certification, including land application of sludge and septage wastes;
  - 2. <u>Disposal activities of limited duration which require an insignificant waste management event approval;</u>
  - 3. Materials or activities which are exempt from the Solid Waste Management Rules;
  - 4. Composting activities which are exempt from the Solid Waste Management Rules;
  - 5. Material which is reused;
  - 6. Solid waste which is recycled. This shall not include incineration of solid waste to produce energy or fuel products.
- B. Acceptable use determination will not be considered for any requests utilizing a solid waste which:
  - 1. Contains, or will create a hazardous waste, as defined by the Vermont Hazardous Waste Management Regulations, effective March 2013, or as amended;
  - 2. Will result in a threat to human health and safety or to the environments, or will cause a nuisance;
  - 3. Contains asbestos;
  - 4. Contains infectious waste; or

- 5. <u>Is incinerated to produce energy or fuel products.</u>
- C. Any person who wishes to receive written approval for acceptable use of a solid waste must submit a written request to the Solid Waste Management Program. The request must contain the following:
  - 1. A description of the proposed solid waste to be used, including identification of the source of the waste, characteristics of the proposed waste (physical, chemical and biological) and the quantities to be used;
  - 2. A description of the proposed use of the solid waste, including:
    - i. Where the material will be used;
    - ii. The duration of use;
    - iii. A description of any manufacturing or processing by which an end product is produced; and
    - iv. Characteristics of the end product (physical, chemical and biological); if an end product is to be marketed.
  - 3. A demonstration that the proposed use will not adversely affect human health and safety and the environment or create a nuisance. This demonstration may contain one or more of the following:
    - i. A characterization plan;
    - ii. Historic analytical test data;
    - iii. Risk assessment; and/or
    - iv. A risk management plan
  - 4. A management plan which addresses the management of the solid waste from its source through its use, including, but not limited to, storage of the waste prior to use, quality control/quality assurance, stormwater control, risk management, application rates, monitoring and a contingency plan.
  - 5. <u>If required by the Agency, financial assurance adequate to cover the costs associated with implementing a contingency plan.</u>
- D. Approved acceptable uses of materials and associated activities will be posted to the Solid Waste Management programs website. If an acceptable use determination has been made, any person need not apply to use the material for the approved activity.

#### §6-1503 Standards for Hazardous Household and Conditionally Exempt Generator Wastes

A. Conditionally Exempt Generator (CEG) hazardous waste <u>and household hazardous waste (HHW)</u> may be accepted for handling and transfer only by solid waste facilities certified or approved by the Secretary to manage these wastes according to the provisions of Subchapter 9 of these rules.

#### B. Collection Events

- 1. Collection events may take place only at certified solid waste facilities or at other locations specifically approved by the Secretary pursuant to § 6-301(C). The facility management plan must address the wastes to be managed and the activities to be conducted during the event.
- 2. If the event is held at a site which does not have appropriate safety, accident and contingency provisions in its existing facility management plan, the collection event organizer must submit a safety, accident and contingency plan to the Secretary for the specific site or sites where the collection event will take place.
- 3. All wastes must be handled by personnel appropriately trained in accordance with all applicable federal and state statutes and regulations.
- 4. At the end of an event, all CEG hazardous waste collected during the event must be packaged, labeled, and transported off-site by a permitted hazardous waste transporter in accordance with Vermont Hazardous Waste Management Regulations.
- 5. At the end of an event, all HHW collected during the event must be removed from the site. The waste may be managed as a regulated hazardous waste as provided in §6-1503(B)(4) <u>above</u> or may be transported to a certified HHW/CEG Hazardous Waste Collection Facility or a Semi-Permanent HHW/CEG Hazardous Waste Collection Unit.

#### C. Mobile HHW/CEG Hazardous Waste Collection Units

- 1. Mobile HHW/CEG Hazardous Waste Collection Units must meet the requirements of § 6-1503(B) for collection events and the following requirements:
- 2. The operator of the mobile collection unit must be a permitted hazardous waste transporter when CEG hazardous wastes are collected;
- 3. The mobile collection unit must return to a solid waste facility certified to support it upon completion of each collection event; and
- **4.** Collected HHW and CEG hazardous wastes may remain in the mobile unit while at the vehicles' support facility for no more than 10 days before it must be transferred to another permitted hazardous waste transporter, a certified hazardous waste treatment, storage or disposal facility, or to a HHW/CEG hazardous waste collection facility or a semi-permanent HHW/CEG hazardous waste collection unit. All transfers of collected HHW and CEG hazardous wastes to another

permitted hazardous waste transporter must occur at a certified facility or a certified collection site.

#### Research, Development and Demonstration Permits

- A. Facilities proposing to recirculate leachate shall address the following issues:
  - 1. Demonstrate that the facility accepts more than 2,500 tons per year of municipal solid waste at the facility.
  - 2. Provide research or demonstration objectives that will be achieved by permitting the project and milestones for evaluation at permit renewal.
  - 3. Demonstrate that the facility has screening measures in place to ensure that household hazardous wastes, hazardous wastes, and other solid wastes that may pose any issue to leachate quality have been screened from disposal at the landfill.
  - 4. Demonstrate that the facility has adequate measures in place to protect human health, the environment, and ensure the proper management of leachate.
  - 5. Demonstrate that the facility leachate collection system maintains less than a 12-inch depth of leachate head on the liner system using the Hydrologic Evaluation of Landfill Performance (HELP) Model or other approved method. The applicant shall include estimates of leachate production resulting from changes in operations.
  - 6. Demonstrate that the facility landfill gas collection system is adequate to collect and destroy additional landfill gas generated as a result of additional liquids. The applicant shall include estimates of gas production resulting from changes in operations.
  - 7. Demonstrate that the facility protects surface water and groundwater in a manner that meets or exceeds the requirements established in 40 C.F.R. Part 258.
  - 8. Demonstrate that the addition of water to a landfill does not compromise the geotechnical stability of the waste. The application shall include a stability analysis demonstrating the physical stability of the landfill prior to the issuance of a permit to include consideration of the increased density of the solid waste due to saturation, pore pressures, and angles of internal friction. Any movement of the waste and shall be documented and the application shall include a description of the methods for determining whether there is any actual or potential movement of the waste or liquid seepage from the landfill. Leachate will not be transferred to another site. Leachate recirculation will only occur at site generated.
  - 9. Provide an Operations and Maintenance Plan that outlines the system operator responsibilities in at least the following:
    - i. Limits to stop pumping leachate in recirculation lines;

- ii. Parameters used for monitoring to determine maximum leachate volume within a set area:
- iii. Application at low rate and uniform distribution;
- iv. Maintain a routine testing program with a sampling protocol to monitor changes in leachate composition;
- v. Schedule and log of daily inspections for odors, clogged piping, and leachate outbreaks;
- vi. Contingency/emergency plan in the event that the recirculation system becomes inoperable;
- vii. Maintain records for each sump area with:
  - 1. dates and method of recirculation,
  - 2. rates recirculated in gallons per minute,
  - 3. leachate generation volume,
  - 4. source of leachate,
  - 5. any system adjustments,
  - 6. weather conditions, and
  - 7. outbreaks and correction measures taken;
  - 8. Track pump cycle times by measuring inflow rates;
  - 9. Track location, timing, and amount of leachate recirculated;
  - 10. Track total leachate in storage; and
  - 11. Track site precipitation and other weather conditions that influence operational decisions.
- 10. Other demonstrations that the Secretary finds necessary to protect human health, the environment, and prevent the creation of a nuisance condition.
- 11. When reviewing a renewal application for a sanitary landfill that recirculates leachate the Secretary shall review the research objectives established for the project and evaluate whether the project achieved those objectives. The Secretary may, at the Secretary's sole discretion, terminate the project if it is determined that the project does not achieve the objective.

#### §6-1504 Mercury-Added Consumer Products

To facilitate the source reduction of mercury from solid waste and to help ensure proper handling, recycling and disposal of waste mercury-added consumer products, certain mercury-added items must be labeled prior sale.

- A. After July 1, 1999, a manufacturer or wholesaler may not sell at retail in this state, to a retailer in this state, or for use in this state, and a retailer may not knowingly sell, any of the items listed in 10 V.S.A. §7106 at retail if they contain added mercury, unless the item is labeled in accordance with § 6-1504(C) or §6-1504(D).
- B. Items to be labeled are:
  - 1. A thermostat or thermometer
  - 2. A switch, individually or as part of another product

- 3. A medical or scientific instrument
- 4. An electric relay or other electrical device
- 5. A lamp
- 6. A battery, sold to the public, other than a button battery
- C. The following labeling standards shall apply to all mercury-added consumer products listed in § 6-1504(B) above:
  - 1. The label must clearly inform the purchaser or consumer that mercury is present in the item and that the item may not be disposed of or placed in a waste stream destined for disposal until the mercury is removed and reused, recycled, or otherwise managed to ensure that mercury does not become part of solid waste or wastewater.
  - 2. A label must be clearly visible and legible to consumers prior to purchase of the product. The label must be located on a surface of the product that is visible during installation and removal.
  - 3. For labels affixed to products, the required words or symbols must be printed, mounted, molded, or engraved on the surface of the product using materials sufficiently durable to remain legible for the useful life of the product.
  - 4. For products with enclosed mercury-added switches, both the enclosed device and the larger product must be labeled.
  - 5. A listed mercury-added consumer product must be labeled if manufactured after July 1, 1999.
  - 6. Primary responsibility for affixing the required labels shall be on the manufacturer, and not on the wholesaler or retailer.
- D. The Secretary may administratively authorize alternative labeling, including package labeling, for mercury-added consumer products listed in § 6-1504(B) under the following conditions:
  - 1. A manufacturer must submit a written request for alternative labeling documenting that a product or class of products cannot reasonably be labeled to comply with specific requirements of § 6-1504(A), §6-1504(B); and/or §6-1504(C).
  - 2. All authorizations for alternative labeling granted under this Subsection will be limited in duration and may be renewed.

#### Appendix A

Specific Requirement for Financial Responsibility Instruments

#### A-1 <u>Trust Fund with Surety</u>

- (a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by establishing a trust fund for the benefit of the Agency according to the requirements of this section and subsections A-2 (b), (c), (f), (g), (h), (i), (k), and (l). The surety bond must guarantee full payment into the trust fund of the cost estimate for closure or post-closure plan submitted with the certification application. The trustee for the trust fund must be a bank or financial institution which has the authority to act as a trustee and whose operations are regulated and examined by the State of Vermont. The surety for the bond must be a surety company licensed to operate as a surety in the State of Vermont and must be approved by the secretary.
- (b) The trust agreement and surety bond shall be executed in the form provided for such purposes by the secretary.
- (c) Payments to the trust fund must be made annually by the certification holder over the term of the state certification issued for such facility or over the life of the facility if such facility life is shorter than the term of the state permit. Payments must be made as follows:
  - (1) The first payment shall be made when the trust is established and shall be at least equal to the cost estimated divided by the number of years in the term of the permit or life of the facility, whichever is the shorter.
  - (2) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be the cost estimate minus the current value of the trust fund, divided by the number of years remaining in the term of the certification or the remaining number of years in the life of the facility, whichever is the shorter.
- (d) The certification holder may accelerate payments into the trust fund or he may deposit the full amount of the cost estimate at the time the fund is established. However, the value of the fund must be maintained at no less than the value would have been if annual payments were made as specified in paragraphs a and c of this subsection.
- (e) Whenever the cost estimate changes after the pay-in period is completed, the certification holder shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new cost estimate, the certification holder must, within 90 days of the change in the cost estimate, deposit a sufficient amount into the fund so that its value after payment at least equals the amount of the new estimate, or obtain other financial assurance as specified in subchapter 9 to cover the difference. if the value of the trust fund is

greater than the total amount of the cost estimate, the certification holder may submit a written request to the secretary for release of the amount which is in excess of the cost estimate.

- (f) If the certification holder substituted other financial responsibility as specified in subchapter 9 for all or part of the trust fund, he may submit a written request to the secretary for release of the amount which is greater than the amount required as a result of the substitution.
- (g) Within 60 days after receiving a request from the certification holder for release of funds specified in paragraphs e and f of this subsection, the secretary will instruct the trustee to release to the certification holder such funds as the secretary specifies in writing.
- (h) After beginning final closure or during the period of post-closure care, a certification holder or any other person authorized to conduct closure, may request reimbursement for closure or post-closure expenditures respectively by submitting itemized bills to the secretary within 60 days after receiving bills for closure or post-closure activities. The secretary shall instruct the trustees to make reimbursement in those amounts as the secretary determines are in accordance with the closure or post-closure plan or are otherwise justified.
- (i) The secretary shall agree to terminate the trust when:
  - (1) The certification holder substitutes alternate financial responsibility as specified in subchapter 9; or
  - (2) The secretary notifies the certification holder that he is no longer required by subchapter 9 to maintain financial responsibility for the closure or post-closure of the facility.
- (j) The term of the surety bond shall be for the pay in period of the trust fund.
- (k) The bond must guarantee that the certification holder will:
  - (1) Fund the trust in the amount of the cost estimate by the end of the pay-in period; or
  - Ouring the pay-in period, fund the trust in the amount of the cost estimate within 15 days after an order to begin closure or post-closure care by the secretary or by a court, or following issuance of a notice of revocation of the certification; or
  - (3) Provide alternative assurance within 90 days after receipt by the secretary of a notice of cancellation of the bond by the surety.

#### A-2 Surety Bonds

(a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by obtaining a surety bond according to the requirements of this section and by submitting the original copy of

the bond with the facility closure or post-closure plans with the certification application. Only bonds issued by surety companies licensed to operate as sureties in the State of Vermont and approved by the secretary will satisfy the requirements of this section.

- (b) A surety bond form supplied by the secretary shall be used by the applicant and the surety.
- (c) The surety bond must name the applicant as the principal and name the State of Vermont as the obligee.
- (d) The term of the bond shall be for the life of the facility for which a certification is applied by the applicant through the closure period. A bond used for post-closure responsibility shall extend through the post-closure period.
- (e) The bond must guarantee that the certification holder will:
  - (1) Perform final closure or post-closure care in accordance with the closure or post-closure plan and other requirements in the certification for the facility; or
  - (2) Perform final closure or post-closure care following an order to begin closure or post-closure care issued by the secretary or by a court, or following issuance of a notice of revocation of the certification; or
  - (3) Provide alternate financial assurance as specified in this section within 90 days after receipt by the secretary of a notice of cancellation of the bond from the surety.
- (f) The surety will become liable on the bond obligation when the certification holder fails to perform as guaranteed by the bond.
- (g) The penal sum of the bond must be in an amount at least equal to the amount of the closure or post-closure cost estimate.
- (h) Whenever the cost estimate increases to an amount greater than the amount of the penal sum of the bond, the certification holder shall, within 90 days after the increase, cause the penal sum of the bond to be increased to an amount at least equal to the new estimate or obtain other financial assurance, as specified in subchapter 9, to cover the increase. Whenever the cost estimate decreases, the penal sum may be reduced to the amount of the cost estimate following written approval by the secretary. Notice of an increase or decrease in the penal sum must be sent to the secretary by certified mail within 90 days after the change.
- (i) the bond shall remain in force for its term unless the surety sends written notice of cancellation by certified mail to the certification holder and to the secretary. Cancellation can not occur, however:

- (1) During the 120 days beginning on the date of receipt of the notice of cancellation by the secretary as shown on the signed return receipt; or
- (2) While a compliance or enforcement action is pending.
- (j) following a determination that the certification holder has failed to perform final closure or postclosure care in accordance with the approved plan and other certification requirements when required to do so, the surety shall perform final closure or post-closure care in accordance with the terms of the bond, approved plan and other certification requirements or closure order. As an alternative to performing final closure or post-closure care the surety may forfeit the full amount of the penal sum to the State.
- (k) The certification holder may cancel the bond if the secretary has given prior written consent based on receipt of evidence of alternative financial assurance as specified in subchapter 9.
- (l) The secretary will notify the surety if the certification holder provides alternate financial assurance as specified in subchapter 9.
- (m) The surety will not be liable for deficiencies in the performance of closure by the certification holder after the certification holder has been notified by the secretary that the certification holder is no longer required by subchapter 9 to maintain financial assurance for closure or post-closure care of the facility.
- (n) As performed either by the certification holder or the surety, proper closure of post-closure care shall be deemed to have occurred only when the secretary so determines according to these rules.

#### A-3 Letters of Credit

- (a) An applicant may satisfy the requirements of subchapter 9 by obtaining an irrevocable standby letter of credit according to the requirements of this suction and by submitting the original copy of the letter of credit attached to the facility closure or post-closure plan along with the certification application. For new facilities, the letter of credit must be effective before the initial receipt of waste at the facility for which it is issued. The issuing institution must be a bank or other financial institution which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the State of Vermont.
- (b) The wording of the letter of credit must be approved by the secretary.
- (c) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year. If the issuing institution decides not to extend the letter of credit beyond the current expiration date it must, at least 120 days before the date, notify both the certification holder and the secretary by certified mail of that decision. The 120 day period will begin on the date of receipt

by the secretary as shown on the signed return receipt. Expiration can not occur, however, while a compliance or enforcement action is pending.

- (d) The letter of credit must be issued for at least the amount of the closure or post-closure cost estimate.
- (e) Whenever the cost estimate increases to an amount greater than the amount of credit, the certification holder shall, within 90 days of the increase, cause the amount of credit to be increased to an amount at least responsibility as specified in subchapter 9 to cover the increase. Whenever the cost estimate decreases, the letter of credit may be reduced to the amount of new estimate following written approval by the secretary. Notice of an increase or decrease in the amount of the credit shall be sent to the secretary by certified mail within 90 days of the change.
- (f) Following a determination that the certification holder has failed to perform closure or post-closure care in accordance with the approved plan or other certification requirement, the secretary will draw on the letter of credit.
- (g) the certification holder must establish alternate financial responsibility as specified in subchapter 8 and obtain written approval from the secretary within 90 days after receipt by both the certification holder and the secretary of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date. if the certification holder does ;not establish such alternative financial responsibility within the 90 days, the secretary will draw on the letter of credit. If the issuing institution grants an extension of the term of credit, the secretary may do the drawing during the last 30 days of credit if the operator has failed to provide alternative financial responsibility as specified in subchapter 9 and obtain written approval of such responsibility from the secretary.
- (h) The secretary shall return the original letter of credit to the issuing institution for termination when:
  - (1) the certification holder substitutes alternate financial responsibility for closure or postclosure as specified in subchapter 9; or
  - (2) The secretary notifies the certification holder, in accordance with section 6-901(l) of these rules, that he is no longer required to maintain financial responsibility for closure or post-closure of the facility.

# A-4 Deposits of Acceptable Collateral

(a) An applicant may satisfy the requirements of subchapter 9, wholly or in part, by filing with the secretary a collateral bond payable to the State of Vermont, conditioned so that the applicant shall comply with the closure or post-closure plan filed for the facility. The amount of the bond shall be at least equal to the estimated closure or post-closure cost of the facility. for which the certification application has been filed or any part thereof not covered by other financial

responsibility instruments. Such bond shall be executed by the applicant after depositing with the secretary acceptable collateral, the market value of which shall be at least equal to the total estimated closure or post-closure cost or any part thereof not covered by other financial responsibility instruments.

- (b) Acceptable collateral may include certificates of deposit, negotiable bonds of the Unite States Government, the State of Vermont or any of its agencies, any government authority within the Sate of Vermont, or any county, municipality or other local bond issuing authority within the State of Vermont approved as acceptable for financial responsibility purposes by the secretary.
- (c) The secretary shall, upon receipt of such collateral, place the instrument(s) with the state treasurer to be held in the name of the state of Vermont in trust, for the purposes for which such deposit is made.
- (d) The certification holder shall be entitled to demand, receive and recover the interest and income from said instrument(s) as it becomes due and payable as long as the market value of the instrument(s) plus any other mechanisms used continue to be at least equal the closure or post-closure cost estimate.
- (d) the certification holder shall also be permitted to replace the collateral instruments with other like instruments of at least equal market value upon proper notification to the secretary and the state treasurer.
- (f) In the event of failure of the certification holder to comply with the final closure or post-closure plan, the secretary shall declare said collateral forfeited and shall request the state treasurer to convert said collateral into cash and transfer such funds to the secretary to be used for final closure or post-closure purposes.
- (g) The term of a collateral bond shall be for the life of the facility through the closure or post-closure period, as appropriate.
- (h) The secretary shall return collateral instruments to the certification holder when:
  - (1) the certification holder substitutes alternate financial responsibility for closure or postclosure as specified in subchapter 9; or
  - (2) the secretary notifies the certification holder, in accordance with these rules, that he is no longer required to maintain financial responsibility for closure or post-closure of the facility.

#### A-5 Financial Test and Corporate Guarantee

- (a) An applicant may satisfy the subchapter 8 requirements for financial responsibility by demonstrating that he passes a financial test as specified in this section. To pass this test the applicant must meet the criteria of either subsection (a)(1) or (a)(2).
  - (1) The applicant must have:
    - (A) two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
    - (B) new working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and
    - (C) tangible net worth of at least \$10 million; and
    - (D) assets in the United States amounting to at least 90% of his total assets or at least six times the sum of the current closure and post-closure cost estimates.
  - (2) The applicant must have:
    - (A) a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and
    - (B) tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and
    - (C) net worth of at least \$10 million; and
    - (D) assets located in the United States amounting to at least 90% of his total assets or at least six times the sum of the current closure and post-closure cost estimates.
- (b) To demonstrate that he meets this test, the applicant shall submit the following items to the secretary.
  - (1) A letter signed by the applicant's chief financial officer and worded as specified by the secretary.
  - (2) A copy of the independent certified public accountant's report on examination of the applicant's financial statement for the latest completed fiscal year; and
  - (3) a special report form the applicant's independent certified accountant to the applicant stating that:

- (A) He has compared the data which the letter from the chief financial officer specifies as having been derived from an independently audited, year-end financial statement for the latest fiscal year with the amounts in such financial statements; and
- (B) In connection with that procedure, no matters come to his attention which caused him to believe that the specified data should be adjusted.
- (c) For a new facility, the applicant shall submit the items specified to the secretary at least 60 days before the date on which solid waste is first received for treatment, storage, or disposal.
- (d) After the initial submission of items specified in subsection (b), the certification holder shall send updated information to the secretary within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in subsection (b).
- (e) If the certification holder no longer meets the requirements of subsection (a), he shall send notice to the secretary of intent to establish alternate financial responsibility as specified in subchapter 9. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the certification holder no longer meets the requirements. The certification holder shall provide the alternate financial responsibility within 120 days after the end of such fiscal year.
- (f) The secretary may, based on a reasonable belief that the certification holder may no longer meet the requirements of subsection (a), require reports of financial condition at any time from the operator in addition to those specified in subsection (b). If the secretary finds, on the basis of such reports or other information, that the certification holder no longer meets the requirements of subsection (a), the certification holder shall provide alternate financial responsibility as specified in subchapter 0 within 30 days after notification of such a finding.
- (g) The secretary may disallow use of this test on the basis of qualification in the opinion expressed by the independent certified public accountant in his report on examination of the applicant's or certification holder's financial statements (see subsection (b)(2)). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The secretary will evaluate other qualifications on an individual basis. The certification holder shall provide alternate financial responsibility as specified in subchapter 9 within 30 days after notification of the disallowance.
- (h) During the period of post-closure care, the secretary may approve a decrease in the current postclosure cost estimate for which this test demonstrated financial responsibility if the certification holder demonstrates to the secretary that the amount of the cost estimate exceeds the remaining costs of the post-closure care.
- (i) the certification holder is no longer required to submit the items specified in subsection (b) when:

- (1) a certification holder substitutes financial responsibility as specified in subchapter 9; or
- (2) the secretary releases the certification holder form the requirements of this section as specified in section 6-902(1) of these rules.
- (j) An certification holder may meet the requirements of this subsection by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor shall be the parent corporation of the certification holder. The guarantor shall meet the requirements for applicant or certification holder in subsections (a) through (g) and shall comply with the terms of the corporate guarantee. The wording of the corporate guarantee shall be specified by the secretary. The corporate guarantee shall accompany the items sent to the secretary as specified in subsection (b). The terms of the corporate guarantee shall provide that:
  - (1) If the certification holder fails to perform final closure or post-closure of a facility covered by the corporate guarantee in accordance with the closure plan or post-closure plan, the guarantor will do so or establish a trust fund in the name of the certification holder as specified in these rules.
  - (2) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the certification holder and to the secretary. The cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the certification holder and the secretary as evidenced by the return receipts.
  - (3) If the certification holder fails to provide alternate financial responsibility as specified in subchapter 9 and obtain the written approval of such alternate responsibility form the secretary within 90 days after the receipt by both the certification holder and the secretary of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial responsibility in the name of the certification holder.

#### APPENDIX B

Processes to Significantly Reduce and Further Reduce Pathogens

1. Processes to Significantly Reduce Pathogens

#### **Aerobic Digestion**

Aerobic conditions are maintained at residence times ranging from 60 days at 15°C to 40 days at 20°C, with a volatile solids reduction of at least 38 percent.

#### **Anaerobic Digestion**

The process is conducted without air at residence times ranging from 60 days at 20°C to 15 days at 30°C, to 55°C, with a volatile solids reduction of at least 38 percent.

# **Air Drying (Sand Beds)**

Sludge is allowed to dry on sand beds for a minimum of 90 days, 60 days of which temperatures average above 0°C on a daily basis. Sludge depth on the drying beds is 9 inches or less at the time the sludge is deposited on the beds.

### **Composting**

Sludge is maintained at minimum operation conditions of 40°C for five days. For four hours during this period the temperature exceeds 55°C. The composting methods used are the static aerated pile, windrow or within-vessel methods.

#### **Lime Stabilization**

Lime is added to produce a pH of 12 after two hours contact.

2. Processes to Further Reduce Pathogens

#### **High Temperature Composting**

Using the within-vessel or static aerated pile composting method, the sludge is maintained at operating conditions of 55°C or greater for three days. Using the windrow composting method, the sludge attains a temperature of 55°C or greater for at least 15 days during the composting period. During the high temperature period, there will be a minimum of five turnings of the windrow.

#### **Heat Drying**

Dewatered sludge cake is dried by direct or indirect contact with hot gases, and moisture content is reduced to 10 percent or lower. Sludge particles reach temperatures well in excess of 80°C.

# **Heat Treatment**

Liquid sludge is heated to temperature of 180°C for 30 minutes.

#### **High Temperature Aerobic Digestion**

Liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55°C - 60°C with a volatile solid s reduction of at least 38 percent.

The processes below do not, on their own, reduce the attraction of disease vectors, therefore, they can only be used after a process to significantly reduce pathogens.

#### **Beta Ray Irradiation**

Sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (20°C).

#### **Gamma Ray Irradiation**

Sludge is irradiated with gamma rays from certain isotopes, such as 60 cobalt and 137 cesium, at dosages of at least 1.0 medarad at room temperature (20°C).

#### **Pasteurization**

Sludge is maintained for at least 30 minutes at a minimum temperature of 70°C.

# METHOD 9095A PAINT FILTER LIQUIDS TEST To receive a copy of the paint filter liquids test (Method 9095AB) contact: Solid Waste Management Program Waste Management Division 103 South Main Street West Office Building Waterbury VT 05671-0404 Telephone 802-241-3444

# Appendix C Fee Schedule for Applications for Certification

3 V.S.A. §2822(j) provides the most current fee schedule for solid waste facilities. At the time of this rule

promulgation the fees are as follows:

Original and renewal applications – excluding recycling and composting facilities and categorical solid waste facilities	\$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification
Original and renewal applications for recycling and composting facilities, excluding categorical solid waste facilities that solely manage recycling or composting solid waste	\$100.00
Original and renewal applications for categorical solid waste disposal facilities	<u>\$100.00</u>
Original and renewal applications for facilities certified pursuant to 10 V.S.A.  §6605 and §6605b, that treat, store or dispose of waste generated solely from mining, extraction or mineral processing	If <25,000 cubic yards operational capacity - \$200.00  If >25,000 cubic yards operational capacity - \$0.95 per cubic yard of operational capacity  Maximum annual payment, \$75,000
Increase in tonnage, excluding recycling and composting facilities, and categorical solid waste facilities	\$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification
Insignificant Waste Management Event  Application	\$100.00 per event